DOCUMENT RESUME

ED 443 352 HE 033 109

AUTHOR	Lucey, Richard, Jr.; Marel, Rozanne; Smith, R. B.; Frank, Blanche; Schmeidler, James
TITLE	Alcohol and Other Drug Use among College Students in New York State: Findings From a Statewide College Survey (1996).
INSTITUTION	New York State Office of Alcoholism and Substance Abuse Services, Albany.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	1999-03-00
NOTE	69p.; Prepared by OASAS' Bureau of Applied Studies and Bureau of Prevention and Intervention Policy and Resource Development.
AVAILABLE FROM	New York State Office of Alcoholism and Substance Abuse Services, 1450 Western Avenue, Albany, NY 12203-3526.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Research (143) -- Tests/Questionnaires (160)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Alcohol Abuse; Alcohol Education; *College Students; *Drug Abuse; Higher Education; Illegal Drug Use; Marijuana; School Policy; Student Attitudes; *Student Behavior; Student Characteristics; *Substance Abuse; Tables (Data); Tobacco
IDENTIFIERS	*Binge Drinking; *New York; Risk Taking Behavior

ABSTRACT

This survey examined alcohol and other drug use among full- and part-time undergraduate students from 18 colleges in New York State. Students (n=4,646) completed questionnaires on demographics; working and living arrangements; academics; perceptions of campus substance abuse policies; drinking behavior and substance abuse patterns; and consequences of use. The study found that alcohol, tobacco, and marijuana were the primary substances used; 81 percent of students reported using alcohol, 46 percent used tobacco, and 34 percent used marijuana. Sections of the report discuss subgroups in the college population that show the highest rates of use (by student characteristic, by region of college location); the widespread practice of binge drinking; measures of all substance use (excluding tobacco); behavioral consequences of alcohol and other drug use (public misconduct, serious personal problems); students' perceptions of substance use (self-reported substance use, how often other students used various substances); perceptions of close friends' views about alcohol or other drug use; and students' perceptions of risk to themselves. In comparing the findings of this study with a 1979 study, dramatic declines were noted in alcohol, marijuana, and cocaine use rates. A final section of the report offers suggestions for prevention programs. The survey questionnaire, information on methodology, and data tables are appended. (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 443 352

NEW YORK STATE OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

GEORGE E. PATAKI, GOVERNOR
JEAN SOMERS MILLER, COMMISSIONER

Alcohol and Other Drug Use Among College Students in New York State

Findings from a Statewide College Survey (1996)

New York State Office of Alcoholism and Substance Abuse Services

Prepared by:

Bureau of Applied Studies
Bureau of Prevention and Intervention Policy and Resource Development

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NEW YORK STATE OFFICE OF ALCOHOLISM
AND SUBSTANCE ABUSE SERVICES

GEORGE E. PATAKI, GOVERNOR
JEAN SOMERS MILLER, COMMISSIONER

Alcohol and Other Drug Use Among College Students in New York State

Findings from a Statewide College Survey (1996)

New York State Office of Alcoholism and Substance Abuse Services

Prepared by:

Bureau of Applied Studies
Bureau of Prevention and Intervention Policy and Resource Development

Alcohol and Other Drug Use Among College Students in New York State

Findings from a Statewide Col ge Survey (1996)

March 1999

New York State Office of
Alcoholism and Substance Abuse Services
1450 Western Avenue
Albany, NY 12203-3526

The New York State Office of Alcoholism and Substance Abuse Services (OASAS) gratefully acknowledges the U.S. Department of Education for funding the project that made this document possible. OASAS also acknowledges the Core Institute, Rensselaer Polytechnic Institute, and the 18 colleges and universities that participated in this study for their dedication and commitment to this project.

Authors
Richard Lucey, Jr., Bureau of Prevention and Intervention Policy and Resource Development
Rozanne Marel, Ph.D., R.B. Smith, M.A., Blanche Frank, Ph.D., James Schmeidler, Ph.D., Bureau of Applied Studies

TABLE OF CONTENTS

Executive Summary i

I. Introduction 1

II. Organization of the Report 2

III. The Survey Design 2

IV. Characteristics of the College Sample 3

V. Findings 4

A. Prevalence of Alcohol and Other Drug Use 4
B. Prevalence of Use by Student Characteristics 6
C. Prevalence of Use by Region of College Location 8
D. Binge Drinking 9
E. Alcohol and/or Other Drug Use Classification 12
F. Behavioral Consequences of Alcohol and Other Drug Use 13
G. Perceptions of the Average Student's Substance Use 15
H. Perceptions of How Close Friends Would Respond to Use 16
I. Perceptions of Risk Associated with Alcohol or Other Drug Use 17
J. Comparison of Findings: 1979 versus 1996 18

VI. Summary and Conclusions 19

Programming Implications 23

References 26

Appendix 27

EXECUTIVE SUMMARY

In 1996, the New York State Office of Alcoholism and Substance Abuse Services (OASAS) conducted a major survey of alcohol and other drug use among full- and part-time undergraduate students in New York State. More than 4,600 students attending 18 colleges throughout the state completed the anonymous, self-administered questionnaire. The findings were statistically projected to reflect the 778,000 full- and part-time undergraduate students enrolled in the state's public and private two- and four-year colleges. The report's appendix details the study design and the questionnaire.

Clearly, alcohol, tobacco, and marijuana are the primary substances used by college students. In the year prior to the survey, 81 percent of students used alcohol, 46 percent used tobacco, and 34 percent used marijuana. In terms of the most serious patterns of use:

- 14 percent of the students use marijuana at least weekly;
- 18 percent of the students smoke cigarettes daily; and
- 41 percent of the students reported "binge drinking" in the prior two weeks (i.e., having five or more alcoholic drinks at one sitting).

The highlights that follow discuss the subgroups in the college population who show the highest rates of use; the association between substance use and other problems; and student perceptions of school policy and of close friends' disapproval. Special emphasis in the discussion is given to the widespread practice of binge drinking. Finally, a comparison of substance use rates among college students (i.e., 1979 versus 1996) gives some perspective to changes that have occurred over time.

Student Characteristics, Substance Use, and Binge Drinking

Analyses of student characteristics reveal the subgroups in the college population who show the highest rates of use. In general, the most important differences concern gender, age, and college living environment. Males have higher use rates than females; younger students (16- to 20-year-olds) have higher use rates than older students (21 years and older); students attending college in Upstate New York and Suburban New York City have higher use rates than those attending college in New York City.[a] Students living on-campus have higher use rates than those living off-campus. Moreover, students involved

---

[a] Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester counties; Upstate New York includes the remaining Upstate counties.

in fraternities or sororities, and students involved in college athletics, also have higher usage rates than those not involved in such activities.

The differences are particularly striking with regard to binge drinking in the previous two weeks, reported by: 50 percent of males compared to 33 percent of females; 45 percent of younger students compared to 34 percent of older students; 48 percent of students attending colleges located in Upstate New York and 44 percent of those attending colleges in Suburban New York City, compared to 28 percent attending colleges in New York City; 52 percent of students residing on-campus compared to 36 percent residing off-campus; 59 percent of those involved in college athletics, compared to 36 percent of those not involved; and finally, 61 percent of those involved in fraternities and sororities, compared to 36 percent of those not involved.

Increasing Substance Use and Increasing Problems

In order to understand the association between the extent of substance use and the likelihood of experiencing other problems, such as public misconduct and serious personal problems, a summary classification scheme was developed reflecting increasing involvement with substance use. The classification scheme includes three mutually-exclusive levels of use in the past year, starting with "alcohol use only" (44 percent of all students), "marijuana use," possibly used with alcohol but no other drugs (20 percent), and finally, "other drug use" such as use of cocaine, hallucinogens, and amphetamines (16 percent). Those who have *not* used alcohol or other drugs in the past year represent about 20 percent of students.

As expected, there is an extremely strong association between being involved with substance use and experiencing a variety of other problems. For instance, in the past year, almost two-thirds (63 percent) of those using illegal drugs other than marijuana have experienced one or more episodes of public misconduct, such as trouble with the police or college authorities, getting into an argument or fight, or damaging property. About 26 percent of "alcohol only" users and 51 percent of users of "marijuana but no other illegal drugs" had such experiences. Similar findings show the relationship between increasing involvement with substances and the increasing likelihood of experiencing associated personal problems, such as being hurt or injured, taken advantage of sexually, and trying to commit suicide.

The survey examined not only self-reported substance use, but also how often the respondent thought that the average student on campus used specific substances. Recent research has been concerned with norms on college campuses and how norm misperceptions can influence students' alcohol and other drug use. The dramatic findings of this survey show that while 34 percent of students reported using marijuana in the past year, 92 percent thought that the average student used at least once a year. Similarly, while 32 percent of students reported tobacco use at least once a week, 88 percent thought that the average student smoked weekly. Clearly, the actual usage rates and the perceptions of these rates are extremely disparate which has serious implications for campus-based prevention efforts.

The survey also dealt with student perceptions of school policy and substance use, and close friends' approval and disapproval of alcohol and other drug use. Virtually all students reported that their campus has a substance abuse policy. Interestingly, when asked if these policies were *enforced*, more than one-half (53 percent) of those who said "no" were binge drinkers compared to 46 percent of those who said "yes." When asked whether their colleges were *concerned* about preventing alcohol and other drug abuse, 49 percent of those who said "no" were binge drinkers, compared to 40 percent of those who said "yes." Many students did not know about these issues. Although binge drinking is widespread, irrespective of college policy, somewhat less binge drinking was reported when the policy was enforced, and still less was reported when students perceived that their college was really concerned about alcohol and other drug use.

Perceptions of close friends' disapproval of substance use behavior generally shows the expected association: students who are less involved with substance use believe their close friends would disapprove of their involvement, and those most involved with substance use indicate the lowest expectations of disapproval by close friends for such activity. Notably, the vast majority of students (88 percent) felt that their close friends would disapprove of their "trying cocaine once or twice." This perception on the part of students may contribute to the relatively low rates of cocaine use currently on college campuses. In contrast, "situational" binge drinking (e.g., at football games, Saturday night fraternity parties) found considerably less disapproval, with 59 percent of students believing their friends would disapprove.

Downward Trend: 1979 versus 1996

The most optimistic finding in the study emerges from a comparison of substance use rates between a comparable 1979 college survey and the 1996 survey under discussion. The comparison showed dramatic declines in the use of alcohol, marijuana, and cocaine. Although findings in 1996 underscore a considerable problem with alcohol and other drug use on the state's college campuses, the progress made in the past 17 years is heartening and strongly suggests that social normative behavior can change, even in a young adult population at risk for such problems.

Alcohol and Other Drug Use Among College Students in New York State, 1996

Introduction

In 1996, the New York State Office of Alcoholism and Substance Abuse Services (OASAS) conducted a major survey of alcohol and other drug use among undergraduate students attending colleges in New York State. A stratified random sample of 18 colleges located throughout the State participated, with more than 4,600 students completing the anonymous, self-administered questionnaire. The sample was then projected to reflect the 778,000 full- and part-time undergraduate students enrolled in the state's public and private two- and four-year colleges.

College students tend to be particularly susceptible to alcohol and other drug abuse, due in large part to a number of risk factors that they face. For example, many students live away from home for the first time, come under strong influence from their peers, and may experience the strain of academic pressures and the need to make important career decisions. Also, the range of social experiences is wider, and risk-taking behavior may find approval. Therefore, with increased freedom and peer acceptance, college years may present situations that can promote alcohol and other drug abuse.

Given these concerns, OASAS has had a particular interest in college students. To address the issues related to alcohol and other drug use among college students, OASAS has been offering technical assistance to institutions of higher education on the development and implementation of prevention programs since 1983. The Regional College Alcohol and Other Drug Consortia Project, which consists of groups of representatives from local colleges and universities, community-based prevention providers, and other service providers, was developed in 1986. In 1990, OASAS expanded the Consortia Project by developing a Statewide College Consortia Steering Committee, which consists of representatives from each regional consortium. Meeting regularly enables the Steering Committee to narrow regional gaps among the various consortia, and ensures a more consistent and dedicated effort in providing effective college alcohol and other drug abuse prevention and intervention programs throughout New York State. The impetus for the statewide Core Survey came from the Steering Committee working together with OASAS' Bureau of Prevention and Intervention Policy and Resource Development and Bureau of Applied Studies.

Organization of the Report

The first sections of this report describe the college survey design, characteristics of the student sample, and prevalence findings for alcohol and other drug use. Given the special concern regarding binge drinking, a separate section is devoted to describing detailed findings for New York State's college students.

The middle sections show the relationships between levels of substance use involvement and behavioral consequences, perceptions of the average student's substance use, perceptions of close friends' disapproval, and students' perceptions of risk for harm. This section also compares changes over time between 1979 and 1996. The final section discusses programming implications.

The Survey Design

The random selection of New York State colleges for this survey followed the pattern of similar statewide secondary and postsecondary school surveys during the past two decades. The first step was to classify the colleges into strata of relatively similar colleges by region of the state and by two- and four-year schools. By a process of randomization, a final list of 18 colleges was selected, geographically distributed throughout the state.

Each of the 18 campuses determined the methodology to be used for its own data collection. On some campuses, the survey was given to students in selected classes and completed during class time. At other schools, a well traveled site, such as a student center or residence hall, was selected. Other strategies for sampling included mailbox distribution, computer-generated lists, and students in line for registration.

The questionnaire used in this study was the Core Alcohol and Drug Survey, a four-page self-administered instrument. This instrument grew out of the perceived need by grantees of the Fund for the Improvement of Postsecondary Education (FIPSE), a granting agency within the U.S. Department of Education, for a standardized alcohol and other drug survey for college students. The survey includes questions on demographics; working and living arrangements; academics; perceptions of campus substance abuse policies and their enforcement; drinking behavior; patterns of use of alcohol, tobacco, marijuana, cocaine, amphetamines, sedatives, hallucinogens, opiates, inhalants, designer drugs, and steroids; perceptions of others' use; location of use; and consequences of use.

The questionnaires were administered on each campus and then sent to the Core Institute (Southern Illinois University at Carbondale), which processed the questionnaires

and created a data file for analysis by OASAS staff. After a few ineligible, incomplete, or grossly frivolous questionnaires were excluded, the remaining questionnaires were sorted by stratum; the questionnaires for each stratum were weighted so that their total was the stratum enrollment. Thus, the weighted questionnaires accurately represent the composition of New York State's colleges and universities.

The Appendix includes a more detailed discussion of the methodology and a copy of the survey instrument.

Characteristics of the College Sample

There were 4,646 student participants in the survey, and they generally represent the larger college population. The following highlights describe the demographic characteristics of the student sample:

- Overall, the majority of survey respondents (58 percent) were female.

- Approximately 58 percent of the respondents were aged 16-20; 33 percent were aged 21-30; and 9 percent were 31 years of age or older. Seventy-four percent were in the "typical" college age range of 18-22. Student respondents attending suburban New York City and Upstate colleges were somewhat younger than respondents from New York City.[b]

- Almost two-thirds (66 percent) of the respondents were underclassmen (i.e., freshmen and sophomores), with juniors and seniors comprising the remaining 34 percent.

- White (non-Hispanic) students comprised 65 percent of all survey respondents. Hispanics represented 14 percent of all college student participants, followed closely by black (non-Hispanic) students (12 percent). Students who identified themselves as Asian/Pacific Islander comprised 4 percent of all respondents. Far higher proportions of Hispanic and black students completing the questionnaire attended colleges in New York City. Whites represented only 37 percent of New York City participants; however,

---

[b] For the purposes of this survey, the regions of the state are Suburban New York City, which includes the Long Island counties of Nassau and Suffolk and the Hudson Valley counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester; New York City, which are the five boroughs; and Upstate, which encompasses the remaining counties in the state.

they represented 69 percent and 85 percent of suburban New York City and Upstate respondents, respectively.

- Other demographic findings were as follows: 91 percent were full-time students; 71 percent lived off-campus; 65 percent worked full- or part-time; and 14 percent spent at least five hours per month in volunteer work.

Findings

Prevalence of Alcohol and Other Drug Use: Lifetime, Annual, and 30-Day Prevalence

Given the wide variety of substances included in the questionnaire, this section details the usage rates for each substance. Table 1 shows the prevalence of lifetime, annual, and current substance use (i.e., past 30 days) among college students in New York State. Figure 1 illustrates the findings on lifetime use.[c] The major findings include:

- Alcohol, tobacco products, and marijuana are the most popular substances used in lifetime by college students in New York State. Alcohol was used by 86 percent of students during their lifetime; tobacco products were used by 59 percent; and marijuana used by nearly one-half of the college students (49 percent). The next most popular substances were hallucinogens (16 percent), amphetamines (15 percent), and cocaine (9 percent).

- In the past year (i.e., in the year prior to Fall 1996), 81 percent of all college students consumed an alcoholic beverage at least once, with 66 percent reporting current use. For students under the age of 21, 68 percent consumed alcohol in the previous 30 days. Comparable figures for tobacco products show that 46 percent of college students indicated use in the past year, with 37 percent reporting use in the past 30 days.

- After alcohol, marijuana was by far the most popular substance used by college students. While nearly one-half (49 percent) of all students acknowledged some marijuana use in their lifetime, about one-third (34 percent) indicated some use in the past year. More than one-fifth (22 percent) of college students in the state admitted using marijuana in the past 30 days.

---

[c] Figures and Tables appear in the Appendix.

- Seventeen percent of students used an illegal drug other than marijuana in the past year; 8 percent currently use an illegal drug other than marijuana.

- Approximately 9 percent of New York State's college students reported use of hallucinogens (e.g., LSD and PCP) in the past year with 3 percent indicating current use.

- Annual use of cocaine (i.e., crack, rock, freebase) was reported by 4 percent of the students; 2 percent admitted use in the past 30 days.

- Usage rates for amphetamines and sedatives included medical (i.e., used as intended under a doctor's prescription) as well as nonmedical use. Annual use of amphetamines was mentioned by 6 percent of the students, while 2 percent indicated some use in the past 30 days. Comparable figures for sedative use indicate that 3 percent of the students reported use in the past year and 1 percent in the past 30 days.

To illustrate the degree of involvement, Table 2 shows the frequency of substance use among those reporting any use in the past year.

- With the exception of the unique usage patterns noted among those consuming alcohol, tobacco, and marijuana, there is a decline in the proportion of students who report increasingly frequent use of almost all substances. For example, in marijuana's case, 13 percent of students reported using six times or less in the past year, 7 percent used between once and twice a month, yet 14 percent used once a week or more in the past year.

- For other substances, there are fewer students reporting increasingly frequent use. When the use of hallucinogens is examined, 7 percent of all students admitted using hallucinogens six times or less in the past year, while 2 percent reported using once or twice a month, and 1 percent used once a week or more. Similarly, 3 percent of all students reported using cocaine six times or less in the past year; 1 percent between once and twice a month; and about 1 percent using at least once a week in the past year.

- When viewing frequency of tobacco use in the past year, the largest proportion of users reported using tobacco as frequently as once a week (i.e., 32 percent of all students used once a week or more), and many of these were daily smokers.

- With regard to alcohol, the highest proportion of students reporting use in the past year (40 percent of all students) admitted using once a week or more. Approximately 20 percent of students used alcohol between once and twice a month in the past year.

Figure 2 presents selected findings on the use of major substances once a week or more in the past year. In general, the findings show that:

- For alcohol, 40 percent used once a week or more in the past year, while 32 percent used tobacco that often, and 14 percent used marijuana. After these three substances, there is a sharp drop off, with amphetamines being the next most frequently used substance (2 percent of students).

Table 3 examines prevalence data for current use (i.e., use in the past 30 days) of various substances. The major findings are:

- Tobacco remains the most frequently used substance among college students: 26 percent of all students used tobacco 10 or more days in the past month; 18 percent indicated daily use.

- Approximately 15 percent of the state's college students used alcohol on 10 or more days in the past month; 1 percent indicated daily use of alcohol.

- Marijuana was the most frequently used illicit substance. Approximately 8 percent of all college students reported using marijuana on 10 or more days in the past month; 2 percent indicated daily use.

Prevalence of Use by Student Characteristics

The relationship between demographic variables and substance use reveals some very important findings. Table 4 presents substance use patterns and consequences among different subgroups of students, including males versus females, younger students versus older students, academically more successful and less successful students, and students residing on- and off-campus.

- Males were much more likely than females to be current users of alcohol (71 percent versus 63 percent), marijuana (28 percent versus 18 percent), or another drug (10 percent versus 6 percent), and to have had six or more

drinking binges[d] in the past two weeks (10 percent versus 3 percent). Males also were much more likely to have driven a car while under the influence of alcohol or other drugs during the past year (35 percent versus 20 percent).

- Younger students (i.e., 16- to 20-year-olds) were more likely than those 21 and older to have used alcohol in the past 30 days (68 percent versus 62 percent), to have had six or more drinking binges in the past two weeks (7 percent versus 4 percent), and to have driven under the influence (27 percent versus 24 percent). Younger students also were much more likely than older students to be current users of marijuana (27 percent versus 16 percent).

- Interestingly, an examination of the relationship between substance use and grade point average (GPA) reveals that students reporting As and Bs were as likely as those reporting Cs, Ds, and Fs to be current users of alcohol (67 percent of the A and B students versus 66 percent of the C, D, and F students) and current users of an illegal drug other than marijuana (8 percent of both groups). Those students receiving the lower grades were slightly more likely to be current users of marijuana (25 percent versus 22 percent) and somewhat more likely to have binged frequently (10 percent versus 5 percent) and to have driven under the influence (32 percent versus 25 percent). Self-reported GPAs do not appear to account for as many differences as some of the other variables presented here.

- With regard to residing on- and off- campus, students living on-campus are much more likely to be current users of alcohol (76 percent versus 63 percent) and to be current users of marijuana (28 percent versus 20 percent). On-campus students also are slightly more likely to have used an illegal drug other than marijuana (10 percent versus 7 percent), and to have had six or more drinking binges during the past two weeks (7 percent versus 5 percent). However, students residing off-campus were more likely to have driven a car while under the influence of alcohol or other drugs in the past year (27 percent of off-campus students versus 23 percent of on-campus students), probably because those living off-campus are more likely to be driving a car on a regular basis.

Two other groups warrant discussion here because of their high rates of substance use: students involved in athletics and students who participate in fraternities and sororities. Although the number of students who engaged in these activities, and who also

---

[d] A drinking binge is defined as having five or more alcoholic drinks at one sitting.

participated in the statewide survey, is relatively small, the findings are nevertheless suggestive and deserve mention.

- Seventy-seven percent of those involved in athletics were current users of alcohol, compared to 64 percent of those not involved. For current marijuana use, 30 percent of student athletes reported use, compared to 20 percent of nonathletes. Usage rates of an illegal drug other than marijuana were similar for the two groups (9 percent of athletes, 8 percent of nonathletes). Those reporting six or more drinking binges in the past two weeks comprised 12 percent of those involved in sports, but only 5 percent of those not involved. Finally, while 36 percent of athletes reported driving a car while under the influence, 24 percent of those not involved in athletics reported such behavior. Clearly, student athletes report substance use behaviors that are at the extremely high end of the groups presented here. In view of the fact that student athletes have high visibility on many college campuses, these findings have serious implications for all students.

- While 82 percent of those involved in fraternities and sororities reported current alcohol use, 63 percent of those not involved in such organizations reported current alcohol use. For current marijuana use, the rates are 33 percent of participants compared to 20 percent of nonparticipants. For the use of illegal drugs other than marijuana, 14 percent of those involved in fraternities or sororities reported use, compared to 7 percent of those not involved. While 13 percent of those involved in fraternities or sororities reported six or more drinking binges in the past two weeks, 5 percent of those not involved reported six or more binges. Finally, 36 percent of those participating in fraternities or sororities reported driving a car while under the influence compared to 24 percent of nonparticipants. Given the importance of fraternities and sororities at many colleges, the higher use rates among the participants of these organizations also should be of concern to the college community.

Prevalence of Use by Region of College Location

Table 5 summarizes regional differences in substance use during the past year and past 30 days for the most frequently used substances.

- For both alcohol and marijuana use, students attending Upstate and Suburban New York City colleges showed consistently higher annual and current use than New York City students.

- With regard to frequency of alcohol use in both the past year and past 30 days, Upstate and Suburban New York City college students showed higher percentages of using once a month or more in the past year and 10 days or more in the past 30 days than their New York City counterparts. A similar pattern was noted when frequency of both annual and current marijuana use was considered, although the percentages reporting frequent use of marijuana were considerably lower overall than was the case for alcohol.

Figure 3 illustrates marijuana use of once a month or more during the past year by region of college location.

- Students attending Upstate and Suburban New York City colleges show consistently higher prevalence rates than New York City students. For marijuana use at a frequency of once a month or more in the past year, the percentages of Upstate students (25 percent) and Suburban students (24 percent) are much higher than New York City students (13 percent).

Binge Drinking

Recently, there has been increased interest, both in the literature and on campuses, in binge drinking, which many researchers define as five or more drinks at one sitting (NIAAA, 1995). It also is worth noting that binge drinking is a specific form of alcohol abuse, and definitional concerns aside, should be viewed as a serious public health problem for college campuses and their surrounding communities. This section examines the characteristics of New York State's college students who reported one or more such experiences in the past two weeks.

Overall, 41 percent of the state's students reported binge drinking in the previous two weeks. This compares to 42 percent of college students nationwide who completed the Core Survey in 1995-1996 (Presley, 1998); 44 percent in a 1993 national study, where binge drinking by women was defined as four or more drinks (Wechsler, 1994); and 41 to 43 percent in a national comparison group from 1988-1992 (Johnston, 1994).

Table 6 presents rates of binge drinking in the past two weeks among different subgroups of students. The findings include:

- Binge drinking is strongly related to gender (50 percent of males compared to 33 percent of females).

- It appears that binge drinking is not related to year in school (40 percent each of freshman, sophomores, and juniors, and 43 percent of seniors); however, it is related to age. Forty-five percent of those under the age of 21 were binge drinkers, compared to 34 percent of those aged 21 and older.

- Binge drinking also is noticeably higher among Upstate (48 percent) and Suburban New York City (44 percent) students than for their New York City counterparts (28 percent). Figure 4 shows binge drinking in the past two weeks by region of college location.

- While 41 percent of all college students reported at least one instance of binge drinking in the two-week period prior to the survey, 6 percent admitted having binge drinking episodes on six or more occasions during the same time period. Again, the regional differences noted above remain: Upstate and Suburban New York City college students were not only more likely to report binge drinking, but were somewhat more likely than their New York City counterparts to report doing it more often in the past two weeks as well.

- Binge drinking also is related to ethnicity. Among whites, 49 percent were binge drinkers in the past two weeks, compared to 29 percent of Hispanics and 18 percent of blacks.

- Whether the student lived on- or off-campus also is strongly related to binge drinking in the past two weeks. Fifty-two percent of on-campus students had binged in the past two weeks, as opposed to 36 percent of off-campus students. Also, type of housing is related to binging: only 36 percent of those living in a house or apartment and 37 percent of those living in college-approved housing reported binge drinking in the past two weeks, compared to 54 percent of those living in residence halls and 81 percent of those living in a fraternity or sorority house.

- Moreover, whether a student was full- or part-time is related to binge drinking (42 percent of full-time students versus 31 percent of part-time students). While more than one-half of the students report having a GPA of B, there is a relationship between GPA and binge drinking. Approximately 31 percent of those who report a GPA of A are binge drinkers, compared to 43 percent of those with GPA of B, and 47 percent of those with a GPA of C, D, or F.

- Place of permanent residence also is related to binge drinking. Forty percent of those residing in New York State reported binge drinking, compared to 48 percent from another state and 32 percent of those whose permanent residence is another country.

- The relationship between knowledge about campus alcohol and other drug policies and binge drinking is an interesting one. Less than 1 percent of the students responded that their campus did not have an alcohol and other drug policy. However, among those who said their campus did have a policy, 43 percent were binge drinkers; among those who said they did not know, 34 percent were binge drinkers. With regard to whether these policies were enforced, 46 percent of those answering in the affirmative were binge drinkers, compared to 53 percent of those answering "no" and 34 percent of those who said they did not know.

- When asked whether the campus had a substance abuse prevention program, those answering "yes" or "no" did not differ on binge drinking (43 percent versus 44 percent), but only 38 percent of those who said they "didn't know" were binge drinkers. Those who did not believe that their campus was concerned about the prevention of alcohol and other drug abuse were more likely to be binge drinkers (49 percent) than those who thought the campus was concerned (40 percent) or did not know if the campus was concerned (37 percent). Finally, those actively involved in efforts to prevent alcohol and other drug abuse problems on their campus were less likely to be binge drinkers (31 percent) than those who are not involved (41 percent).

- Age of first alcohol use was related to binge drinking. Fifty-four percent of those who began drinking alcohol before the age of 16 were binge drinkers, compared to 39 percent of those who began at age 16 or older.

- Frequency of alcohol use in the past year also is related to binge drinking. Among those who drank alcohol in the past year, but tended to use it less than once a week, 23 percent had been binge drinkers in the past two weeks; among those who tended to use alcohol at least weekly, 76 percent reported binge drinking. Similarly, among those who used alcohol one or two days in the past 30 days, 27 percent were binge drinkers, while 57 percent of those who used alcohol three to five days in the past 30 days were binge drinkers, and 86 percent of those using alcohol six or more days in the past 30 days were binge drinkers.

- There is a strong relationship between other substance use and binge drinking. For example, 24 percent of those who never used tobacco were binge drinkers, compared to 52 percent of those who had used tobacco. Also, 23 percent of those who had never used marijuana reported binge drinking, compared to 59 percent of those who had used marijuana in their lifetime.

- Fifty-nine percent of student athletes reported binge drinking in the past two weeks, compared to 36 percent of those not involved in college athletics.

- Of students involved in fraternities or sororities, 61 percent reported binge drinking, compared to 36 percent of students who are not involved.

Alcohol and/or Other Drug Use Classification

Earlier in this report, it was shown that alcohol and marijuana remain the most popular substances among college students. The numbers of students reporting current use, especially frequent use, of other substances are comparatively small. Nevertheless, in an effort to develop an analytically useful summary measure of all substance use, a classification scheme - one reflecting both the types of substances used by college students and the extent of their drug use involvement - was derived empirically by examining patterns of single and multiple use in the past year. This scheme, reflecting use of all substances, with the exception of tobacco, is presented in Table 7.

- Students who had no use of alcohol or other drugs in the past year comprised 20 percent of the college students in New York State.

- Users of "alcohol only" in the past year (approximately 44 percent of all students) were by far, the largest category of substance users, more than doubling those who admitted using "marijuana but no other drugs" (20 percent). Students who reported "other drug use" in the past year, regardless of whether or not they also used marijuana or alcohol, represented about 16 percent of all college students in New York State.

- Table 7 also shows the distribution of types of substance users by the region in which the colleges are located. While about 20 percent reported no alcohol or other substance use in the past year, students attending colleges in New York City were overrepresented (28 percent) among nonusers, compared to students as a whole. Little difference exists by region for those using "alcohol only." However, regional differences do appear once again when one examines use of "marijuana but no other drugs" and "other drug" use. Here,

students attending colleges in New York City were underrepresented among "other drug" and "marijuana but no other drug" users; students in non-New York City colleges were somewhat overrepresented.

Earlier, when data showing the prevalence of current alcohol use were presented (see Table 5), differences by region were described indicating slightly higher rates of "binge drinking" among students enrolled in Upstate and Suburban New York City colleges. Table 8 presents the same data on binge drinking in the past two weeks by the classification scheme of substance involvement. As expected, the relationship is striking:

- Among those students reporting any substance use in the past year, 33 percent of "alcohol only" users admitted one or more instances of binge drinking; 62 percent of "marijuana but no other drug" users did the same; and 76 percent of "other drug" users reported at least one instance of such drinking. Even more dramatic were the data showing differences among those reporting binge drinking "six or more times" in the past two weeks. Here, only 3 percent of "alcohol only" users mentioned six or more instances of binge drinking in the past two weeks. By contrast, 7 percent of "marijuana but no other drug" and 20 percent of those using "other drugs" reported six or more instances of binge drinking.

To some extent, then, the data on binge drinking in the past two weeks provides empirical support for the conceptual validity of the Alcohol and/or Other Drug Use classification scheme employed here as a measure of intensity of substance involvement. This becomes critical now as we turn to the data bearing on some behavioral consequences that students attributed to their own drinking or other drug use within the past year.

Behavioral Consequences of Alcohol and Other Drug Use

In response to Core Survey questions asking students about how often they had engaged in various behaviors reflective of public misconduct[e] or experienced various kinds

---

[e] For the purposes of this survey, public misconduct is defined as one or more instances of any of the following in the past year: trouble with the police, residence hall staff, or other college authorities; getting into an argument or fight; being arrested for DWI/DUI; or damaging property, pulling fire alarm, etc. as a result of drinking or other drug use.

of serious personal problems[f] in the past year, two clusters of items were formed from completed responses (see Table 9 and Figure 5).

- Table 9 shows that about one-third of students engaged in some form of public misconduct during the past year as a result of their drinking or other drug use. When responses were arrayed against the Alcohol and/or Other Drug Use classification scheme, dramatic differences are noted between "alcohol only" users (26 percent of whom reported some misconduct), and both "marijuana" (51 percent) and "other drug" (63 percent) users.

- Twenty-four percent of all students experienced some type of serious personal problem as a consequence of their drinking and/or other drug use. Once again, the greater the involvement with alcohol and/or other drugs, the more likely some kind of serious personal problem would be reported. Only 16 percent of those students who admitted "alcohol only" use experienced a serious personal problem attributable to their substance use. Approximately 37 percent of "marijuana but no other drug" users and 58 percent of those using "other drugs" reported such problems in the past year.

- Finally, negative consequences associated with alcohol and other drug use are strongly related to binge drinking. Thirty percent of those students experiencing no serious problems in the past year related to alcohol or other drug use were binge drinkers, compared to 72 percent of those who acknowledged such problems. Similarly, only 25 percent of those who did not report some type of public misconduct related to alcohol or other drug use in the past year were binge drinkers, compared to 72 percent of those who did report such behavior.

The data indicated above appear consistent with expectations regarding differentials in substance involvement. Specifically, one would expect to find a greater likelihood of public misconduct and serious personal problems with increased levels of substance involvement.

---

[f] A serious personal problem included one or more instances of any of the following in the past year as a result of drinking or other drug use: being hurt or injured, trying unsuccessfully to stop using, having been taken advantage of sexually, taking advantage of another person sexually, seriously thinking about suicide, or seriously trying to commit suicide.

Perceptions of the Average Student's Substance Use

Several researchers have been concerned with norms on college campuses and how norm misperceptions can influence students' alcohol and other drug use (Perkins and Berkowitz, 1986; Haines, 1996). This college survey examined not only self-reported substance use, but also investigated how often the respondent thought that the average students on campus used a variety of substances. The results are dramatic and corroborate the findings of national researchers.

- While 34 percent of students actually reported using marijuana in the past year, 92 percent of students thought that the average students on campus used marijuana at least once a year.
- Forty-six percent of students reported using tobacco, but 94 percent thought that the average student used tobacco.
- Eighty-one percent of students used alcohol in the past year, while 96 percent perceived that the average student did.
- While 9 percent of students reported use of hallucinogens, 6 percent reported amphetamine use, and 4 percent reported cocaine use in the past year, more than 60 percent of respondents thought that the average student used each of these.
- For every other substance listed, including sedatives, inhalants, designer drugs, steroids, and opiates, each of which had fewer than 5 percent of students admitting use in the past year, 48 to 59 percent thought that the average student used these substances.
- When examining reports and perceptions about use at least once a week, the findings are still stunning. While 40 percent of students reported using alcohol at least once a week, 89 percent of students perceived that the average students used that often.
- For marijuana, 14 percent of students used at least weekly, but 66 percent thought that the typical student on campus did.
- Finally, while 32 percent of students reported tobacco use at least once a week, 88 percent thought that the average student smoked weekly.

Clearly, the actual usage rates and the perceptions of these rates at colleges and universities are extremely disparate. The implications from these findings for campus-based prevention efforts are addressed in a later section of this report.

Perceptions of How Close Friends Would Respond to Use

The influence of peers' attitudes on one's own behavior has been well documented in social science research. Table 10 provides an examination of Core Survey items pertaining to close friends' views about alcohol or other drug use. The highlights below show the percent of all students responding to each item who felt their close friends "would disapprove" of such behavior.

- For the items related to marijuana use (i.e., Table 10, a-c), one notes an increase in the percentage of responding students who felt their close friends would disapprove of their "trying marijuana once or twice" (45 percent) to "smoking marijuana occasionally" (55 percent) to "smoking marijuana regularly" (76 percent).

- Higher percentages of all students felt their close friends would disapprove of other substance use beyond just smoking marijuana. Additionally, as noted for marijuana, even higher percentages would disapprove of regular or more frequent use of such substances. For example, 88 percent felt their close friends would disapprove of their "trying cocaine once or twice," while 94 percent believed their close friends would disapprove of their "taking cocaine regularly."

- The only exception to the substance use disapproval pattern noted above was observed for alcohol use. In this case, there may have been greater student tolerance, in general, for "situational" binge drinking (e.g., at football games, Saturday night fraternity parties, etc.) than for "taking four or five drinks nearly every day." Approximately 85 percent of all respondents felt their close friends would disapprove of their "taking four or five drinks nearly every day," while only 59 percent believed their friends would disapprove of their "having five or more drinks in one sitting."

- Table 10 also shows students' perceptions of how their close friends would feel about their own substance involvement for each level of the Alcohol and/or Other Drug Use classification scheme. Generally, nonusers and "alcohol only" users showed the highest percentages of those who believed their close friends would disapprove of their substance use. Those most

involved with substance use apart from alcohol, especially users of "other drugs," indicated the lowest expectations of disapproval from close friends for such activity.

Perceptions of Risk Associated with Alcohol or Other Drug Use

Aside from knowing how one's close friends would be likely to respond to one's own behavior regarding alcohol or other drug use, it also is important to see the extent to which those involved with various substances feel there is "great risk" for harming themselves by continuing their use. Table 11 provides a view of students' perceptions of risk for harm when people engage in selected behaviors. The findings include:

- When viewed as a whole, 47 percent of students felt there was great risk for harm when people "smoke marijuana regularly." Approximately 50 percent of students believed there was great risk when people "have five or more drinks in one sitting."

- Responses to regular use of other drugs and to an item pertaining to unprotected sexual activity with multiple partners showed higher percentages believing there was risk for harm. For example, 80 percent of students believed there was great risk for harm when people "take cocaine regularly," and 75 percent felt the same when people "take LSD regularly." The highest percentage (83 percent) of students claiming there was great risk for harm was reserved for people who "regularly engage in unprotected sexual activity with multiple partners." Despite that high percentage, it should be noted that 17 percent of college students did *not* think there was great risk for that behavior.

- When differences are examined in relation to students' alcohol or other drug use, those most involved with substance use (i.e., "other drug" users) were the least likely among those using substances in the past year to feel there was great risk for harm when people used drugs regularly or drank four or five drinks nearly every day.

- The one behavioral item unrelated to substance use (i.e., regularly engaging in unprotected sex with multiple partners) revealed nearly negligible differences among those reporting any level of substance use in the past year. All users showed equally high percentages of those who felt people were at great risk for harm.

Comparison of Findings: 1979 versus 1996

More than 15 years ago, a major survey was conducted among college students in New York State. At that time, findings indicated significant substance abuse problems in the college population. Although more recent household surveys conducted by OASAS have sampled college students, the numbers have not been large enough to assess substance use in this population.

In 1979, OASAS (i.e., the Division of Substance Abuse Services) conducted a similar survey of full-time, undergraduate college students in New York State. The sample design employed then was almost identical to the one used by OASAS staff in 1996. And while the survey instrument used in 1979 was considerably different from the Core Survey used in 1996, there are some comparable items in each questionnaire from which comparisons in both lifetime and 30-day use prevalence can be made for selected substances.

Table 12 presents prevalence data obtained from both the 1979 and 1996 college surveys on lifetime and current (i.e., past 30 days) use for some of the most popular substances used at each point in time where appropriate comparisons can be made. Since the 1979 survey reported on full-time students only, this comparison will be restricted to full-time students from both surveys. The following differences were noted:

- Table 12 shows a slight decline in the percentage of New York State college students reporting lifetime experience with alcohol from 1979 (97 percent) to 1996 (86 percent). More noteworthy here is the decline in the percentage indicating current use (87 percent and 66 percent reported use in the past 30 days in 1979 and 1996, respectively).

- Among those students indicating current use of alcohol in 1979 and 1996, a somewhat lower percentage (24 percent) admitted drinking on 10 or more days in the past month in 1996 than was the case in 1979 (32 percent).

- Turning to marijuana use, one notes more substantial declines in both lifetime and current use from 1979 to 1996. Approximately 71 percent of New York State's full-time college students reported lifetime experience with marijuana in 1979, compared to 49 percent in 1996. Approximately one-half (51 percent) of the students in 1979 admitted current use, as compared to 23 percent in 1996.

- Among those indicating current marijuana use in 1979 and 1996 for whom frequency of use could be determined (239,000 in 1979 and about 157,000 in 1996), about one-half (51 percent) of the students used on 10 or more days in

the 30-day period prior to the survey in 1979, compared to about 37 percent in the 1996 survey.

- Table 12 shows another noteworthy change from 1979 to 1996. In 1979, about 26 percent of the college students reported lifetime experience with cocaine, as compared to 9 percent in 1996. Even more noticeable are the differences in the percentages of students who admitted any current use (14 percent and 2 percent for 1979 and 1996, respectively).

- Among those students who reported current cocaine use in both the 1979 and 1996 surveys, frequency of use differences for the past 30 days (i.e., prior to each survey) were much less pronounced. In 1979, approximately 17 percent of those students indicating current cocaine use reported use on 10 or more days in the past month, compared to 10 percent of the current cocaine users in 1996.

To briefly summarize the differences noted above with regard to the prevalence of alcohol, marijuana, and cocaine use in 1979 and 1996, the following observation can be made. Lifetime prevalence rates for alcohol, marijuana, and cocaine showed substantial declines between 1979 and 1996. Similar declines also were noted in the percentage of those reporting current use of these same substances between 1979 and 1996.

Summary and Conclusions

This survey is able to document the prevalence, frequency, and particular patterns of alcohol, tobacco, and other drug use among undergraduate college students in New York State. Clearly, alcohol, tobacco, and marijuana are the primary substances used by college students. In the year prior to the survey, 81 percent of students used alcohol, 46 percent used tobacco, and 34 percent used marijuana. In contrast, 17 percent used other illegal drugs in the previous year, such as cocaine and hallucinogens. Many students had used two or more substances. In terms of the more serious patterns of use, 14 percent of the students use marijuana at least once a week, 18 percent are daily smokers of cigarettes, and 41 percent of the students reported binge drinking in the previous two weeks – having five or more alcoholic drinks at one sitting.

Analyses of student characteristics reveal the subgroups in the college population who show the highest rates of use. In general, the most important differences concern gender, age, and college living environment. Males have higher usage rates than females; younger students (16- to 20-year-olds) have higher rates than older students (21 years and older); and students attending college in Upstate New York and Suburban New York City

have higher rates than those attending college in New York City. Students living on-campus have higher use rates than those living off-campus. Moreover, students involved in fraternities or sororities, and students participating in college athletics also have higher rates than those not involved in such activities. The differences are particularly striking with regard to binge drinking in the previous two weeks, reported by: 50 percent of males compared to 33 percent of females; 45 percent of younger students compared to 34 percent of older students; 48 percent of students attending colleges located in Upstate New York and 44 percent of those attending colleges in Suburban New York City, compared to 28 percent attending colleges in New York City; 52 percent of students residing on-campus compared to 36 percent residing off-campus; 59 percent of those involved in college athletics, compared to 36 percent of those not involved; and 61 percent of students involved in fraternities and sororities, compared to 36 percent of those students not involved.

In order to understand the association between the extent of substance use and the likelihood of experiencing other problems, such as public misconduct and serious personal problems, a summary classification scheme of substance use was developed. The classification includes three mutually-exclusive levels of use in the past year starting with "alcohol use only" (44 percent of all students), "marijuana use," possibly with alcohol but no use of other drugs (20 percent), and "other drug use," such as use of cocaine, hallucinogens, and amphetamines (16 percent). Those who have not used alcohol or other drugs in the past year represent about 20 percent of students. As expected, there is an extremely strong association between being involved with substance use and experiencing a variety of other problems. For instance, almost two-thirds (63 percent) of those using "other drugs" have experienced one or more episodes of public misconduct in the past year associated with drinking and other drug use, such as trouble with the police or college authorities, getting into an argument or fight, or damaging property. Approximately 26 percent of "alcohol only" users and 51 percent of users of "marijuana but no other illegal drugs" had such experiences. Similar findings show the relationship between increasing involvement with substances and the increasing likelihood of experiencing associated personal problems, such as being hurt or injured, having been taken advantage of sexually, and trying to commit suicide.

The survey examined not only self-reported substance use, but also how often the respondent thought that the average student on campus used specific substances. Recent research has been concerned with norms on college campuses and how norm misperceptions can influence students' alcohol and other drug use. The dramatic findings of this survey show that while 34 percent of students reported using marijuana in the past year, 92 percent thought that the average student used at least once a year. Similarly, while 32 percent of students reported tobacco use at least once a week, 88 percent thought that the average student smoked weekly. Clearly, the actual usage rates and the perceptions of

these rates are extremely disparate which has serious implications for campus-based prevention efforts.

The survey also dealt with student perceptions of school policy and substance use, and close friends' approval and disapproval of alcohol and other drug use. Virtually all students reported that their campus did have an alcohol and other drug policy. Interestingly, when asked whether these policies were enforced, more than one-half (53 percent) of those who said "no" were binge drinkers, compared to 46 percent of those who said "yes." When asked whether their colleges were concerned about preventing alcohol and other drug use, 49 percent of those who said "no" were binge drinkers, compared to 40 percent of those who said "yes." Many students did not know about these issues. Although binge drinking is widespread, irrespective of college policy, somewhat less binge drinking was reported when the policy was enforced, and still less was reported when students perceived that their college was really concerned about alcohol and other drug use.

Perceptions of close friends' disapproval of substance use behavior generally shows the expected association: students who are less involved with substance use believe their close friends would disapprove of their involvement, and those most involved with substance use indicate the lowest expectations of disapproval by close friends for such activity. Notably, the vast majority of students (88 percent) felt that their close friends would disapprove of their "trying cocaine once or twice." This perception on the part of students may contribute to the relatively low rates of cocaine use on the college campus. In contrast, "situational" binge drinking (e.g., at football games, Saturday night fraternity parties) found considerably less disapproval, with 59 percent of students believing their friends would disapprove.

Finally, students' perception of risk for harming themselves by their substance use indicates that the more involved students are with substance use, especially "other drug" use, the less likely their perception of great risk. However, one behavioral item that students regarded as having the greatest risk for harm (83 percent) was unrelated to substance use - unprotected sexual activity with multiple partners. Despite the high percentage, it is of concern that almost one in five students (17 percent) did *not* think there was great risk for this behavior.

The most optimistic finding in the study is the comparison of substance use rates between a comparable 1979 college survey and the 1996 survey under discussion. The comparison showed dramatic declines in the use of alcohol, marijuana, and cocaine. Although findings in 1996 underscore a considerable problem with alcohol and other drug use on college campuses, the progress made in the past 17 years is heartening and strongly

suggests that social normative behavior can change, even in a young adult population at risk for such problems.

PROGRAMMING IMPLICATIONS

The findings from the statewide Core Survey offer the opportunity to examine both the extent and nature of alcohol and other drug abuse, and the level of attitude, knowledge, and behavior on college campuses around New York State. With established data in hand, the survey can provide a focus for program planning efforts and offers a wealth of information for future initiatives. Yet, while we now have the facts and figures to document the degree to which New York State's college students are using alcohol and other drugs, we are faced with the question: Where do we go from here?

In a broad sense, we live in a "quick fix" society. Rather than looking at long-term solutions to specific issues, such as alcohol and other drug abuse, short-term solutions are often attempted, with the hope that the problem will just "go away." Although a simplistic approach is often used, it is not very practical, especially in an economic sense. Prevention must be viewed as a viable, cost-effective method of dealing with health and wellness.

Since the OASAS College Program was started in 1982, the field of alcohol and other drug abuse prevention has undergone several evolutions. This is the result of intensive evaluation research that continues to reveal what doesn't work in prevention, and more important, what *does* seem to work. Currently, there are several approaches that appear to show the most promise for being effective at preventing alcohol and other drug abuse on college campuses.

Within a public health context, promising developments are being found in strategies that use the Risk and Protection Model for substance abuse prevention, developed by researchers at the University of Washington, Social Development Research Group. This model, which serves as the OASAS framework for prevention, incorporates many theories about alcohol and substance abuse (i.e., social learning, developmental stage theory, problem behavior theory, and the biopsychosocial model), and identifies programmatic services designed to decrease risk and increase protection. A key component of the Risk and Protection Model is the application of research-based strategies and activities to the appropriate target populations in the correct settings and at the proper level of intensity. This is most commonly viewed as the application of "best practices," which are based on the research of the past 15 years.

There are two categories of risk factors for substance abuse that colleges should examine in an effort to reduce alcohol and other drug abuse on campus. First, there are contextual (environmental) factors which provide legal and normative expectations; second, there are individual and interpersonal (family, school, peers) factors to be recognized. Preventive work that seeks to address risk factors for drug abuse must clearly

consider how a particular intervention is expected to address risk: by directly eliminating or reducing a risk factor, or by moderating its effects through the enhancement of protective factors, such as changing social norms, enforcing school policy, or enhancing critical thinking skills. From a public health perspective, college campuses can serve as unique and important environments to promote health and prevent disease.

As current research indicates, including this statewide college survey, most students think that their peers are using more alcohol and other drugs than they really are. The survey findings document that 89 percent of the state's college students believe that their fellow students drink alcohol at least once a week, when in fact, less than one-half of the state's students engage in this behavior (40 percent). Additionally, findings indicate that 4 percent of students believe that their peers do not drink alcohol; in reality, the survey documents a fivefold misperception, since 19 percent of students report nonuse.

National studies have been conducted on how these norm misperceptions influence student alcohol and other drug use (Perkins, 1997). College students have definite perceptions of the alcohol-related behaviors and attitudes of other students, which in turn influence their own pattern of use. Yet these beliefs about the substance use of their peers are frequently incorrect, and if not addressed properly, can undermine a campus' prevention efforts. Additional research has shown that reducing misperceptions of substance use is an effective strategy for reducing actual use (Haines, 1996). Ultimately, the research collectively suggests that if the substance abuse norm misperceptions are corrected, the actual substance abuse rates will decline.

Now that some promising approaches to substance abuse prevention on college campuses have been identified, the effectiveness of these efforts must be fully examined and documented. The nationally-recognized OASAS Workplan instrument may be a useful tool in the evaluation efforts of colleges and universities.

The Workplan instrument is intended to focus the individual campus on results achieved, rather than on activities completed. This framework recognizes that focusing on results increases the probability that the intended outcomes will occur (e.g., a 10 percent reduction in first-year students' misperception of campus alcohol and other drug use). The required components of the results-focused Workplan include the identification and documentation of:

- **Target Populations** (i.e., individuals/groups to be served) such as student athletes, Greek organization members, or students living on campus.

- **Performance Targets** are changes in behavior on which the program focuses, such as reducing norm misperceptions.

- **Service Approaches** which are utilized to achieve the established performance target. An example of an appropriate service approach is to implement a campaign to address and correct norm misperceptions.

- **Verification Methods** for each of the various services offered (i.e., techniques used to learn if the performance targets were met for the population served). An example of an appropriate verification method would be documented results from the Core Survey.

Based on the findings from this survey, and other similar studies being conducted nationwide, it is apparent that research related to alcohol and other drug abuse on college campuses must continue. As part of its commitment to collegiate substance abuse prevention, OASAS continues to provide technical assistance at the local, regional, and statewide levels to individual colleges, universities, and regional consortia who are developing and implementing campus-based programs.

OASAS also continues to conduct further research on the issue of collegiate substance abuse. For example, in 1998, OASAS initiated the 1998 New York State College Alcohol-Related Risks Survey (CARS). This project seeks to estimate the prevalence of alcohol and binge drinking among the state's college students; examine the extent to which college students are exposed to alcohol-related risks, especially traffic safety risks; assess the prevalence of alcohol problems (alcohol abuse and dependence) among college students and their needs for treatment services; and analyze specific cultural, environmental, and personal factors that foster the high prevalence of alcohol use and binge drinking among college students. A report that highlights the findings from that study was released by OASAS in January 1999.

Obviously, a college's special resources and needs will shape its response to dealing with alcohol- and other drug-related problems, however, whether located in urban, suburban, or rural communities, effective prevention programs will share common elements. They should be designed to specify a setting and target population. For example, target populations may be based on age, gender, or ethnicity. An understanding of the risks faced by a target group provides the focus for identifying appropriate risk and protective factors and developing subsequent prevention strategies.

Finally, to be effective, prevention efforts must coordinate resources and services, and should elicit the support of individuals, educational institutions, businesses and organizations, and government agencies at every level. A primary goal of prevention programs should be to encourage long-term change in lifestyle, by offering new opportunities and supporting healthy behaviors.

REFERENCES

Haines, Michael P., *A Social Norms Approach to Preventing Binge Drinking at Colleges and Universities*, The Higher Education Center for Alcohol and Other Drug Prevention, 1996.

Johnston, Lloyd D., et al., *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1993*, National Institute on Drug Abuse, 1994.

National Institute on Alcohol Abuse and Alcoholism, "College Students and Drinking," *Alcohol Alert*, U.S. Department of Health and Human Services, July 1995.

Perkins, H. Wesley and Berkowitz, Alan D., "Perceiving the Community Norms of Alcohol Use Among Students: Some Research Implications for Campus Alcohol Education Programming," *The International Journal of the Addictions*, Volume 21, Nos. 9 and 10, 1986.

Perkins, H. Wesley, "College Student Misperceptions of Alcohol and Other Drug Norms Among Peers: Exploring Causes, Consequences, and Implications for Prevention Programs," *Designing Alcohol and Other Drug Prevention Programs in Higher Education: Bringing Theory Into Practice*, The Higher Education Center for Alcohol and Other Drug Prevention, 1997.

Presley, Cheryl A., et al., "Recent Statistics on Alcohol and Other Drug Use on American College Campuses: 1995-96," The Core Institute, Available online (www.siu.edu/~coreinst), 1998.

Wechsler, Henry, et al., "Health and Behavioral Consequences of Binge Drinking in College: A National Survey of Students at 140 Campuses," *Journal of the American Medical Association*, Volume 272, No. 21, 1994.

APPENDIX

Methodology

Sampling

The random selection of colleges for this survey followed the pattern of similar statewide secondary and postsecondary school surveys over the past two decades. The first step was to classify the colleges into strata (i.e., categories of relatively similar colleges). For this survey, there were six strata, based on a combination of Health Services Areas (HSAs): New York City; suburbs (Mid-Hudson and Long Island HSAs), and the rest of the state; and college level (two- and four-year). Then, for each stratum, the undergraduate enrollment, both full- and part-time, was listed for each college, and the cumulative total calculated for each college. Using a table of random numbers, an ordered random sample of colleges was drawn from each stratum. For each random number up to the total number in the stratum, the selected college was the one with the random number below its cumulative total but above the cumulative total for the previous college listed.

The second step was selection of an initial list of colleges. Since strata differed in their enrollments, it was determined that 19 colleges would be selected, from two to five in each stratum, so that there was one college for every 41,000 students enrolled in the stratum. Within each stratum, the colleges were selected in order of the random numbers, with a restriction to ensure distribution of boroughs in New York City and HSAs in the suburbs and the rest of the state. For each area, two-year colleges, which are less numerous, were selected first. The first could be anywhere, but subsequent colleges could not be in a borough or HSA from which there had already been a selection.

Four-year colleges were then selected with the same restriction. After there was a college from each borough or HSA in the stratum, colleges were chosen in order of random numbers, but with no more than two in a borough or HSA. This ensured that the initial list of colleges was well distributed in the boroughs or HSAs of each stratum.

Using random numbers in this way makes the probability that a college is selected proportional to its enrollment. A large college has more random numbers in the cumulative list than a small college. However, several small colleges grouped together have a total enrollment comparable to a large college, so there is a substantial probability that one of the small colleges will be chosen. The initial sample included a mix of large and small colleges. It also included a mixture of private and public colleges, although this was not controlled in the sampling procedure. If a college refused to participate, the college with

the next highest random number in that HSA was invited to participate as its replacement. This ensured that the geographic distribution of the initial sample was maintained.

The eventual sample consisted of 18 colleges. Each of these campuses determined the appropriate methodology to be used for data collection. On some campuses, the survey was given to students in selected courses and completed during class time. At other schools, a well traveled site, such as a student center or residence hall, was selected. Other strategies for sampling included mailbox distribution, computer-generated lists, and students in line for registration.

Questionnaire

The questionnaire used in this study was the Core Alcohol and Drug Survey, a four-page self-administered instrument. This instrument grew out of the perceived need by grantees of the Fund for the Improvement of Postsecondary Education (FIPSE), a granting agency within the U.S. Department of Education, for a standardized alcohol and other drug survey for college students. The survey includes questions on demographics; working and living arrangements; academics; perceptions of campus substance abuse policies and their enforcement; drinking behavior; patterns of use of alcohol, tobacco, marijuana, cocaine, amphetamines, sedatives, hallucinogens, opiates, inhalants, designer drugs, and steroids; perceptions of others' use; location of use; and consequences of use.

The questionnaires were administered on each campus and then sent to the Core Institute, which processed the questionnaires and created a data file for analysis by OASAS. After a few ineligible, incomplete, or grossly frivolous questionnaires were excluded, the remaining questionnaires were sorted by stratum. Then, all of the questionnaires for each stratum were weighted so that their weighted total was the stratum enrollment. Thus, the weighted questionnaires accurately represent the composition of New York State colleges by stratum.

A copy of the questionnaire appears on the following pages.

Core Alcohol and Drug Survey

Long Form

FIPSE Core Analysis Grantee Group

Core Institute
Student Health Programs
Southern Illinois University
Carbondale, IL 62901

Please use a number 2 Pencil.

For additional uses:

A 0 1 2 3 4 5 6 7 8 9
B 0 1 2 3 4 5 6 7 8 9
C 0 1 2 3 4 5 6 7 8 9
D 0 1 2 3 4 5 6 7 8 9
E 0 1 2 3 4 5 6 7 8 9

1. Classification:
- Freshman
- Sophomore
- Junior
- Senior
- Grad/professional
- Not seeking a degree
- Other

2. Age:

0 0
1 1
2 2
3 3
4 4
5 5
6 6
7 7
8 8
9 9

3. Ethnic origin:
- American Indian/ Alaskan Native
- Hispanic
- Asian/Pacific Islander
- White (non-Hispanic)
- Black (non-Hispanic)
- Other

4. Marital status:
- Single
- Married
- Separated
- Divorced
- Widowed

5. Gender:
- Male
- Female

6. Is your current residence as a student:
- On-campus
- Off-campus

7. Are you working?
- Yes, full-time
- Yes, part-time
- No

8. Living arrangements:

A. Where: *(mark best answer)*
- House/apartment/etc.
- Residence hall
- Approved housing
- Fraternity or sorority
- Other

B. With whom: *(mark all that apply)*
- With roommate(s)
- Alone
- With parent(s)
- With spouse
- With children
- Other

9. Approximate cumulative grade point average: *(choose one)*

A+ A A- B+ B B- C+ C C- D+ D D- F

10. Some students have indicated that alcohol or drug use at parties they attend in and around campus reduces their enjoyment, often leads to negative situations, and therefore, they would rather not have alcohol and drugs available and used. Other students have indicated that alcohol and drug use at parties increases their enjoyment, often leads to positive situations, and therefore, they would rather have alcohol and drugs available and used. Which of these is closest to your own view?

	Have available	Not have available
With regard to drugs?		
With regard to alcohol?		

11. Student status:
- Full-time (12+ credits)
- Part-time (1-11 credits)

12. Campus situation on alcohol and drugs:

	yes	no	don't know
a. Does your campus have alcohol and drug policies?			
b. If so, are they enforced?			
c. Does your campus have a drug and alcohol prevention program?			
d. Do you believe your campus is concerned about the prevention of drug and alcohol use?			
e. Are you actively involved in efforts to prevent drug and alcohol use problems on your campus?			

13. Place of permanent residence:
- In-state
- USA, but out of state
- Country other than USA

14. Think back over the last two weeks. How many times have you had five or more drinks* at a sitting?
- None
- Once
- Twice
- 3 to 5 times
- 6 to 9 times
- 10 or more times

***A drink is a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink.**

15. Average # of drinks* you consume a week:

(If less than 10, code answers as 00, 01, 02, etc.)

0 0
1 1
2 2
3 3
4 4
5 5
6 6
7 7
8 8
9 9

16. At what age did you first use...
(mark one for each line)

	8 or younger	9	10	11	12	13	14	15	16	17	18	19	20	21 or older
a. Tobacco (smoke, chew, snuff)														
b. Alcohol (beer, wine, liquor)*														
c. Marijuana (pot, hash, hash oil)														
d. Cocaine (crack, rock, freebase)														
e. Amphetamines (diet pills, speed)														
f. Sedatives (downers, tudes)														
g. Hallucinogens (LSD, PCP)														
h. Opiates (heroin, smack, horse)														
i. Inhalants (glue, solvents, gas)														
j. Designer drugs (ecstasy, MDMA)														
k. Steroids														
l. Other illegal drugs														

*Other than a few sips

© Core Institute 1989, 1990, 1991, 1992, 1993, 1994

17. Within the last year about how often have you used...
(mark one for each line)

a. Tobacco (smoke, chew, snuff)	
b. Alcohol (beer, wine, liquor)	
c. Marijuana (pot, hash, hash oil)	
d. Cocaine (crack, rock, freebase)	
e. Amphetamines (diet pills, speed)	
f. Sedatives (downers, ludes)	
g. Hallucinogens (LSD, PCP)	
h. Opiates (heroin, smack, horse)	
i. Inhalants (glue, solvents, gas)	
j. Designer drugs (ecstasy, MDMA)	
k. Steroids	
l. Other illegal drugs	

18. During the past 30 days on how many days did you have:
(mark one for each line)

a. Tobacco (smoke, chew, snuff)	
b. Alcohol (beer, wine, liquor)	
c. Marijuana (pot, hash, hash oil)	
d. Cocaine (crack, rock, freebase)	
e. Amphetamines (diet pills, speed)	
f. Sedatives (downers, ludes)	
g. Hallucinogens (LSD, PCP)	
h. Opiates (heroin, smack, horse)	
i. Inhalants (glue, solvents, gas)	
j. Designer drugs (ecstasy, MDMA)	
k. Steroids	
l. Other illegal drugs	

19. How often do you think the average student on your campus uses...
(mark one for each line)

a. Tobacco (smoke, chew, snuff)	
b. Alcohol (beer, wine, liquor)	
c. Marijuana (pot, hash, hash oil)	
d. Cocaine (crack, rock, freebase)	
e. Amphetamines (diet pills, speed)	
f. Sedatives (downers, ludes)	
g. Hallucinogens (LSD, PCP)	
h. Opiates (heroin, smack, horse)	
i. Inhalants (glue, solvents, gas)	
j. Designer drugs (ecstasy, MDMA)	
k. Steroids	
l. Other illegal drugs	

20. Where have you used...
(mark all that apply)

a. Tobacco (smoke, chew, snuff)	
b. Alcohol (beer, wine, liquor)	
c. Marijuana (pot, hash, hash oil)	
d. Cocaine (crack, rock, freebase)	
e. Amphetamines (diet pills, speed)	
f. Sedatives (downers, ludes)	
g. Hallucinogens (LSD, PCP)	
h. Opiates (heroin, smack, horse)	
i. Inhalants (glue, solvents, gas)	
j. Designer drugs (ecstasy, MDMA)	
k. Steroids	
l. Other illegal drugs	

21. Please indicate how often you have experienced the following due to your drinking or drug use during the last year...
(mark one for each line)

a. Had a hangover	
b. Performed poorly on a test or important project	
c. Been in trouble with police, residence hall, or other college authorities	
d. Damaged property, pulled fire alarm, etc.	
e. Got into an argument or fight	
f. Got nauseated or vomited	
g. Driven a car while under the influence	
h. Missed a class	
i. Been criticized by someone I know	
j. Thought I might have a drinking or other drug problem	
k. Had a memory loss	
l. Done something I later regretted	
m. Been arrested for DWI/DUI	
n. Have been taken advantage of sexually	
o. Have taken advantage of another sexually	
p. Tried unsuccessfully to stop using	
q. Seriously thought about suicide	
r. Seriously tried to commit suicide	
s. Been hurt or injured	

22. Have any of your family had alcohol or other drug problems: *(mark all that apply)*

- ○ Mother
- ○ Father
- ○ Stepmother
- ○ Stepfather
- ○ Brothers/sisters
- ○ Mother's parents
- ○ Father's parents
- ○ Aunts/uncles
- ○ Spouse
- ○ Children
- ○ None

23. If you volunteer any of your time on or off campus to help others, please indicate the approximate number of hours per month and principal activity:

- ○ Don't volunteer, or less than 1 hour
- ○ 1–4 hours
- ○ 5–9 hours
- ○ 10–15 hours
- ○ 16 or more hours

Principal volunteer activity is: _____

BEST COPY AVAILABLE

24. Within the last year to what extent have you participated in any of the following activities? *(mark one for each line)*

	Not involved	Involved	Active participant	Leadership position
a. Intercollegiate athletics	○	n.a	○	○
b. Intramural or club sports	○	n.a	○	○
c. Social fraternities or sororities	○	○	○	○
d. Religious and interfaith groups	○	○	○	○
e. International and language groups	○	○	○	○
f. Minority and ethnic organizations	○	○	○	○
g. Political and social action groups	○	○	○	○
h. Music and other performing arts groups	○	○	○	○
i. Student newspaper, radio, TV, magazine, etc.	○	○	○	○

25. In the first column, indicate whether any of the following have happened to you within the last year while you were in and around campus. If you answered yes to any of these items, indicate in the second column if you had consumed alcohol or other drugs shortly before these incidents.

	Happened to you			Consumed alcohol or drugs	
	yes	no		yes	no
a. Ethnic or racial harassment	○	○		○	○
b. Threats of physical violence	○	○	→	○	○
c. Actual physical violence	○	○		○	○
d. Theft involving force or threat of force	○	○	If yes	○	○
e. Forced sexual touching or fondling	○	○	→	○	○
f. Unwanted sexual intercourse	○	○		○	○

26. How do you think your close friends feel (or would feel) about you... *(mark one for each line)*

	Don't disapprove	Disapprove	Strongly disapprove
a. Trying marijuana once or twice	○	○	○
b. Smoking marijuana occasionally	○	○	○
c. Smoking marijuana regularly	○	○	○
d. Trying cocaine once or twice	○	○	○
e. Taking cocaine regularly	○	○	○
f. Trying LSD once or twice	○	○	○
g. Taking LSD regularly	○	○	○
h. Trying amphetamines once or twice	○	○	○
i. Taking amphetamines regularly	○	○	○
j. Taking one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day	○	○	○
k. Taking four or five drinks nearly every day	○	○	○
l. Having five or more drinks in one sitting	○	○	○
m. Taking steroids for body building or improved athletic performance	○	○	○

27. Do you believe that alcohol has the following effects? *(mark one for each line)*

	yes	no
a. Breaks the ice	○	○
b. Enhances social activity	○	○
c. Makes it easier to deal with stress	○	○
d. Facilitates a connection with peers	○	○
e. Gives people something to talk about	○	○
f. Facilitates male bonding	○	○
g. Facilitates female bonding	○	○
h. Allows people to have more fun	○	○
i. Gives people something to do	○	○
j. Makes food taste better	○	○
k. Makes women sexier	○	○
l. Makes men sexier	○	○
m. Makes me sexier	○	○
n. Facilitates sexual opportunities	○	○

28. On this campus, drinking is a central part in the social life of the following groups: *(mark one for each line)*

	yes	no
a. Male students	○	○
b. Female students	○	○
c. Faculty/staff	○	○
d. Alumni	○	○
e. Athletes	○	○
f. Fraternities	○	○
g. Sororities	○	○

29. Campus environment: *(mark one for each line)*

	yes	no
a. Does the social atmosphere on this campus promote alcohol use?	○	○
b. Does the social atmosphere promote other drug use?	○	○
c. Do you feel safe on this campus?	○	○

30. Compared to other campuses with which you are familiar, this campus' use of alcohol is... *(mark one)*

- Greater than other campuses ○
- Less than other campuses ○
- About the same as other campuses ○

31. Housing preferences: *(mark one for each line)*

	yes	no
a. If you live in university housing, do you live in a designated alcohol-free/ drug-free residence hall?	○	○
b. If no, would you like to live in such a residence hall unit if it were available?	○	○

32. To what extent do students on this campus care about problems associated with... *(mark one for each line)*

	Not at all	Slightly	Somewhat	Very much
a. Alcohol and other drug use	○	○	○	○
b. Campus vandalism	○	○	○	○
c. Sexual assault	○	○	○	○
d. Assaults that are non-sexual	○	○	○	○
e. Harassment because of gender	○	○	○	○
f. Harassment because of sexual orientation	○	○	○	○
g. Harassment because of race or ethnicity	○	○	○	○
h. Harassment because of religion	○	○	○	○

33. To what extent has your alcohol use changed within the last 12 months?

- Increased ○
- About the same ○
- Decreased ○
- I have not used alcohol ○

34. To what extent has your illegal drug use changed within the last 12 months?

- Increased ○
- About the same ○
- Decreased ○
- I have not used drugs ○

35. How much do you think people risk harming themselves (physically or in other ways) if they... *(mark one for each line)*

	No risk	Slight risk	Moderate risk	Great risk	Can't say
a. Try marijuana once or twice	○	○	○	○	○
b. Smoke marijuana occasionally	○	○	○	○	○
c. Smoke marijuana regularly	○	○	○	○	○
d. Try cocaine once or twice	○	○	○	○	○
e. Take cocaine regularly	○	○	○	○	○
f. Try LSD once or twice	○	○	○	○	○
g. Take LSD regularly	○	○	○	○	○
h. Try amphetamines once or twice	○	○	○	○	○
i. Take amphetamines regularly	○	○	○	○	○
j. Take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day	○	○	○	○	○
k. Take four or five drinks nearly every day	○	○	○	○	○
l. Have five or more drinks in one sitting	○	○	○	○	○
m. Take steroids for body building or improved athletic performance	○	○	○	○	○
n. Consume alcohol prior to being sexually active	○	○	○	○	○
o. Regularly engage in unprotected sexual activity with a single partner	○	○	○	○	○
p. Regularly engage in unprotected sexual activity with multiple partners	○	○	○	○	○

36. Mark one answer for each line:

	yes	no
a. Did you have sexual intercourse within the last year?	○	○
If yes, answer b and c below.		
b. Did you drink alcohol the last time you had sexual intercourse?	○	○
c. Did you use other drugs the last time you had sexual intercourse?	○	○

37. During the past 30 days, to what extent have you engaged in any of the following behaviors? *(mark one for each line)*

	Zero times	One time	Two times	3–5 times	6–9 times	10 or more times
a. Refused an offer of alcohol or other drugs	○	○	○	○	○	○
b. Bragged about your alcohol or other drug use	○	○	○	○	○	○
c. Heard someone else brag about his/her alcohol or other drug use	○	○	○	○	○	○
d. Carried a weapon such as a gun, knife, etc. (do not count hunting situations or weapons used as part of your job)	○	○	○	○	○	○
e. Experienced peer pressure to drink or use drugs	○	○	○	○	○	○
f. Held a drink to have people stop bothering you about why you weren't drinking	○	○	○	○	○	○
g. Thought a sexual partner was not attractive because he/she was drunk	○	○	○	○	○	○
h. Told a sexual partner that he/she was not attractive because he/she was drunk	○	○	○	○	○	○

38. To what extent do you agree with the following statements? *(mark one for each line)*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
a. I feel valued as a person on this campus	○	○	○	○	○	○
b. I feel that faculty and staff care about me as a student	○	○	○	○	○	○
c. I have a responsibility to contribute to the well-being of other students	○	○	○	○	○	○
d. My campus encourages me to help others in need	○	○	○	○	○	○
e. I abide by the university policy and regulations that concern alcohol and other drug use	○	○	○	○	○	○

39. In which of the following ways does other students' drinking interfere with your life on or around campus? *(mark one for each line)*

	yes	no
a. Interrupts your studying	○	○
b. Makes you feel unsafe	○	○
c. Messes up your physical living space (cleanliness, neatness, organization, etc.)	○	○
d. Adversely affects your involvement on an athletic team or in other organized groups	○	○
e. Prevents you from enjoying events (concerts, sports, social activities, etc.)	○	○
f. Interferes in other way(s)	○	○
g. Doesn't interfere with my life	○	○

BEST COPY AVAILABLE

Mark Reflex® by NCS MM201109-1 32 Printed in U.S.A.

Table 1: Substance Use Among College Students
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Type of Substance[a]	Never Used (%)	Lifetime Use (%)	Use in Past Year (%)	Current Use - Past 30 Days (%)
Tobacco	41	59	46	37
Alcohol	14	86	81	66
Marijuana	51	49	34	22
Cocaine	91	9	4	2
Amphetamines[b]	85	15	6	2
Sedatives[b]	94	6	3	1
Hallucinogens	84	16	9	3
Opiates	97	3	1	1
Inhalants	93	7	3	1
Designer Drugs	93	7	4	2
Steroids	98	2	1	*
Other Drugs	95	5	3	1

Example of how to read the table: Among responding students, 49 percent have used marijuana at least once.

* Less than 0.5 percent.

[a] Hallucinogens such as LSD and PCP; amphetamines such as diet pills and "speed"; sedatives such as "downers" and "ludes" (i.e., quaaludes); inhalants such as glue, solvents, gas; "designer" drugs such as ecstasy and MDMA.

[b] Distinctions were not made between nonmedical and medical use of these substances.

Table 2: Frequency of Substance Use in Past Year
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Type of Substance[a]	Any Use in Past Year (%)	Used 1-6 Times in Past Year (%)	Used Once or Twice a Month (%)	Used Once a Week or More in Past Year (%)
Tobacco	46	9	5	32
Alcohol	81	20	20	40
Marijuana	34	13	7	14
Cocaine	4	3	1	1
Amphetamines[b]	6	3	1	2
Sedatives[b]	3	1	1	*
Hallucinogens	9	7	2	1
Opiates	1	1	*	*
Inhalants	3	2	1	*
Designer Drugs	4	3	1	*
Steroids	1	*	*	*
Other Drugs	3	2	1	*

Example of how to read the table: Among responding students, 14 percent have used marijuana once a week or more in the past year.

* Less than 0.5 percent.

[a] Hallucinogens such as LSD and PCP; amphetamines such as diet pills and "speed"; sedatives such as "downers" and "ludes" (i.e., quaaludes); inhalants such as glue, solvents, gas; "designer" drugs such as ecstasy and MDMA.

[b] Distinctions were not made between nonmedical and medical use of these substances.

Table 3: Frequency of Current Substance Use
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Type of Substance[a]	Current Use - Past 30 Days (%)	Used 1-2 Days (%)	Used 3-9 Days (%)	Used 10-29 Days (%)	Used Every Day (%)
Tobacco	37	6	5	8	18
Alcohol	66	22	29	14	1
Marijuana	22	8	6	6	2
Cocaine	2	1	1	*	*
Amphetamines[b]	2	1	1	*	*
Sedatives[b]	1	*	*	*	*
Hallucinogens	3	2	1	*	*
Opiates	1	*	*	*	*
Inhalants	1	1	*	*	*
Designer Drugs	2	1	*	*	*
Steroids	*	*	*	*	*
Other Drugs	1	1	*	*	*

Example of how to read the table: Among responding students, 8 percent have used marijuana on one or two days in the past 30 days.

* Less than 0.5 percent.

[a] Hallucinogens such as LSD and PCP; amphetamines such as diet pills and "speed"; sedatives such as "downers" and "ludes" (i.e., quaaludes); inhalants such as glue, solvents, gas; "designer" drugs such as ecstasy and MDMA.

[b] Distinctions were not made between nonmedical and medical use of these substances.

Table 4: Patterns of Substance Use and Student Characteristics
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Selected Characteristics by Substance Use and Related Behavior	Gender		Age		Average Grades		Campus Residence	
	F	M	16-20	21+	A-B	C-F	On	Off
Statewide Projected College Population	414,000	304,000	441,000	317,000	559,000	159,000	198,000	494,000
Currently use alcohol (past 30 days)	63%	71%	68%	62%	67%	66%	76%	63%
Currently use marijuana (past 30 days)	18	28	27	16	22	25	28	20
Currently use illegal drugs other than marijuana (past 30 days)	6	10	10	5	8	8	10	7
Had six or more drinking binges (past two weeks[a])	3	10	7	4	5	10	7	5
Drove a car while under the influence (past year[b])	20	35	27	24	25	32	23	27

Example of how to read the table: Among those responding, 35 percent of male college students in New York State have driven a car one or more times while under the influence of either alcohol or other drugs during the past year.

[a] Binge drinking is defined in the Core Survey as having "five or more drinks at a sitting."

[b] Students were asked to indicate how often they had "driven a car while under the influence" of drinking or other drug use during the past year.

Table 5: Most Frequently Used Substances by Region of the State[b]
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Most Frequently Used Substances	Total Students NYS (%) N=778,000	Upstate (%) N=331,000	Suburban NYC (%) N=195,000	NYC (%) N=252,000
Alcohol				
Total Reporting Any Use in Past Year	81	85	84	72
Used once a month or more in past year	61	68	64	49
Total Current Use (past 30 days)	66	73	71	53
Used 10 or more days in past 30 days	15	21	14	8
Percentage of students reporting binge drinking[a] (past two weeks)	41	48	44	28
Percentage of students reporting binge drinking six or more times (past two weeks)	6	8	6	3
Marijuana				
Total Reporting Any Use in Past Year	34	39	39	24
Used once a month or more in past year	21	25	24	13
Total Current Use (past 30 days)	22	27	25	13
Used 10 or more days in past 30 days	8	11	9	5

Example of how to read the table: Among responding students, about 15 percent of all students reported drinking on 10 or more days in the past 30 days.

[a] Binge drinking is defined in the Core Survey as having "five or more drinks at a sitting."

[b] Regions of the state: Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester counties; New York City includes the five boroughs; and Upstate includes the remaining counties in the state.

Table 6: Binge Drinking* and Student Characteristics
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Selected Characteristics	Percentage of Students Having One or More Drinking Binges in the Past Two Weeks
Gender	
Male	50
Female	33
Year in School	
Freshman	40
Sophomore	40
Junior	40
Senior	43
Age	
Less than 21	45
21 and older	34
Region**	
Upstate	48
Suburban New York City	44
New York City	28
Ethnicity	
White	43
Black	18
Hispanic	29
Campus Residency	
On-Campus	52
Off-Campus	36
Type of Housing	
House or apartment	36
College-approved housing	37
Residence hall	54
Fraternity or sorority	81
Enrollment Status	
Full-Time	42
Part-Time	31
Grade Point Average	
A	31
B	43
C, D, or F	47
Place of Permanent Residence	
New York State	40
Another State	48
Outside U.S.	32
Tobacco Use	
Never Used	24
Used in Lifetime	52
Marijuana Use	
Never Used	23
Used in Lifetime	59

* Binge drinking is defined in the Core Survey as having "five or more drinks at a sitting."

** Regions of the state: Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester counties; New York City includes the five boroughs; and Upstate includes the remaining counties in the state.

Table 7. Alcohol and Other Drug Use Classificatiorf and Region of the State[b]
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Alcohol and Other Drug Use Classification	Total Students NYS (%) N=778,000	Upstate (%) N=331,000	Suburban NYC (%) N=195,000	NYC (%) N=252,000
None	20	16	17	28
Alcohol	44	42	42	45
Marijuana	20	22	23	16
Other Drugs	16	20	18	11

Example of how to read the table: Among responding students attending upstate colleges, 22 percent have used marijuana but no other substance (except for alcohol) in the past year.

- Alcohol and Other Drug Use Classification divides all students into four groups ranging from no involvement to very serious involvement.

- Regions of the state: Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester counties; New York City (NYC) includes the five boroughs; and Upstate includes the remaining counties in the state.

Table 8: Binge Drinking* in the Past Two Weeks by Alcohol and Other Drug Use Classification
Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Binge Drinking in the Past Two Weeks	Alcohol and Other Drug Use Classification in Past Year			
	Total N=778,000	Alcohol Use N=135,000	Marijuana Use N=157,000	Other Drug Use N=128,000
Percentage of students reporting binge drinking (past two weeks)	41	33	62	76
Percentage of students reporting binge drinking six or more times (past two weeks)	6	3	7	20

Example of how to read the table: Among responding students who reported any alcohol or other drug use in the past year, 33 percent of those indicating "alcohol only" use reported at least one instance of binge drinking in the past two weeks.

Note: Total excludes 158,000 nonusers of alcohol or other substances.

* Binge drinking is defined in the Core Survey as having "five or more drinks at a sitting."

Table 9: Consequences of Alcohol and Other Drug Use by Alcohol and Other Drug Use Classification
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Selected Behavioral Consequences Attributed to Drinking or Other Drug Use in the Past Year	Alcohol and Other Drug Use Classification in Past Year			
	Total N=778,000	Alcohol Use N=335,000	Marijuana Use N=157,000	Other Drug Use N=128,000
Percentage of students who engaged in some form of public misconduct*	32	26	51	63
Percentage of students who experienced some kind of serious personal problem*	24	16	37	50

Example of how to read the table: Among responding students who reported use of alcohol only, 26 percent engaged in some form of public misconduct during the past year which they attributed to their drinking.

Note: Total excludes 158,000 nonusers of alcohol or other substances.

* Public misconduct is defined as one or more instances of any of the following in the past year: trouble with the police, fighting/arguments, DWI/DUI, or vandalism as a result of drinking or other drug use.

* Serious personal problems included self-reporting one or more instances of any of the following as a result of drinking/drug use: being hurt or injured, sexually assaulted, suicidality, or trying unsuccessfully to stop using.

Table 10: Perceptions of Close Friends' Disapproval of Respondent's Substance Use by Alcohol and Other Drug Use Classification
778,000 Full- and Part-Time Undergraduate College Students
New York State, Fall 1996

Alcohol or Other Drug Use	Total Percentage of Students Who Disapprove N=778,000	Percentage of Students Indicating Close Friends Would Disapprove			
		Nonusers N=158,000	Alcohol Use N=335,000	Marijuana Use N=157,000	Other Drug Use N=128,000
a. Trying marijuana once or twice	45	77	57	15	14
b. Smoking marijuana occasionally	55	82	71	26	19
c. Smoking marijuana regularly	76	88	87	67	43
d. Trying cocaine once or twice	88	91	93	90	69
e. Taking cocaine regularly	94	92	95	97	91
f. Trying LSD once or twice	82	90	92	80	45
g. Taking LSD regularly	92	92	95	95	81
h. Taking amphetamines once or twice	85	90	91	88	60
I. Taking amphetamines regularly	92	92	94	95	87
j. Taking one or two drinks of an alcoholic beverage nearly every day	62	80	66	56	37
k. Having four-five drinks nearly every day	85	89	89	85	69
l. Having five or more drinks in one sitting	59	86	63	46	30
m. Taking steroids for body building or improved athletic performance	92	91	93	93	89

Example of how to read the table: Among responding students, 76 percent say their close friends would disapprove of their smoking marijuana regularly.

Table 11: Students' Perceptions of Risk Involved by Engaging in Selected Activities by Alcohol and Other Drug Use Classification 778,000 Full- and Part-Time Undergraduate College Students New York State, Fall 1996

Activity	Total Percentage of Students Who Perceived Great Risk N=778,000	Percentage of Students Indicating Perception of Great Risk			
		Nonusers N=158,000	Alcohol Use N=335,000	Marijuana Use N=157,000	Other Drug Use N=128,000
Smoke marijuana regularly	47	62	57	31	22
Take cocaine regularly	80	75	83	81	78
Take LSD regularly	75	72	80	75	64
Take amphetamines regularly	67	65	73	68	51
Have four to five drinks nearly every day	62	66	68	58	51
Have five or more drinks in one sitting	50	69	54	40	29
Regularly engage in unprotected sexual activity with multiple partners	83	76	86	84	84

Example of how to read the table: Among all responding students, 80 percent thought people were at "great risk" for harming themselves if they "Take Cocaine Regularly."

Table 12: Lifetime and Current Use of Selected Substances: 1979[a] versus 1996[b]
Statewide Surveys of New York State College Students

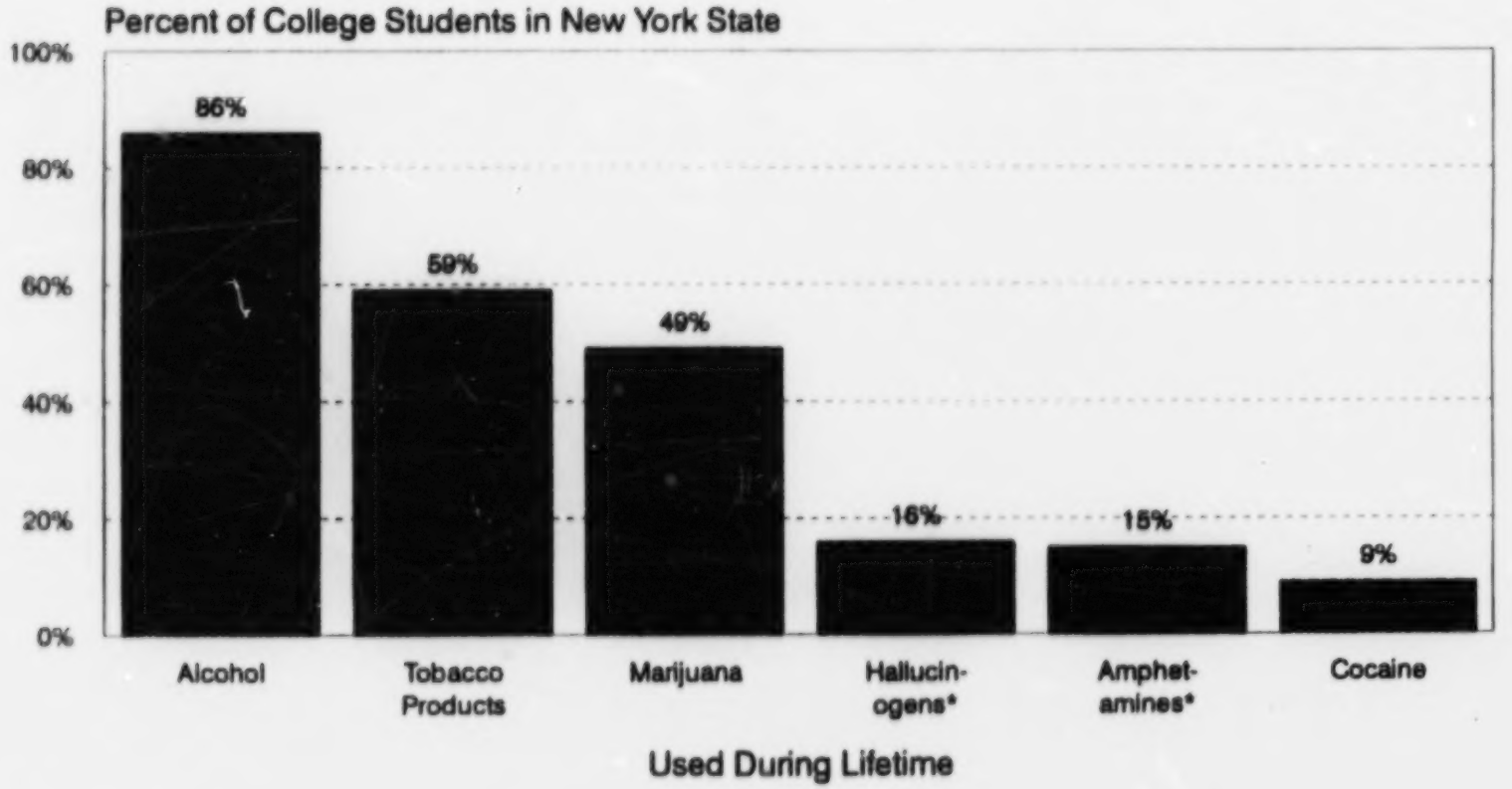
Selected Substances	1979 Percentages (500,000 Full-Time Undergraduates)	1996 Percentages (700,000 Full-time Undergraduates)
Alcohol Use		
Lifetime Use	97	86
Current Use (past 30 days)	87	66
Marijuana Use		
Lifetime Use	71	49
Current Use (past 30 days)	51	23
Cocaine Use		
Lifetime Use	26	9
Current Use (past 30 days)	14	2

Example of how to read the table: Among responding full-time college undergraduates in the 1979 survey, 71 percent had used marijuana at least once, compared to 49 percent in the 1996 survey.

[a] Conducted by New York State Division of Substance Abuse Services.

[b] Conducted by New York State Office of Alcoholism and Substance Abuse Services.

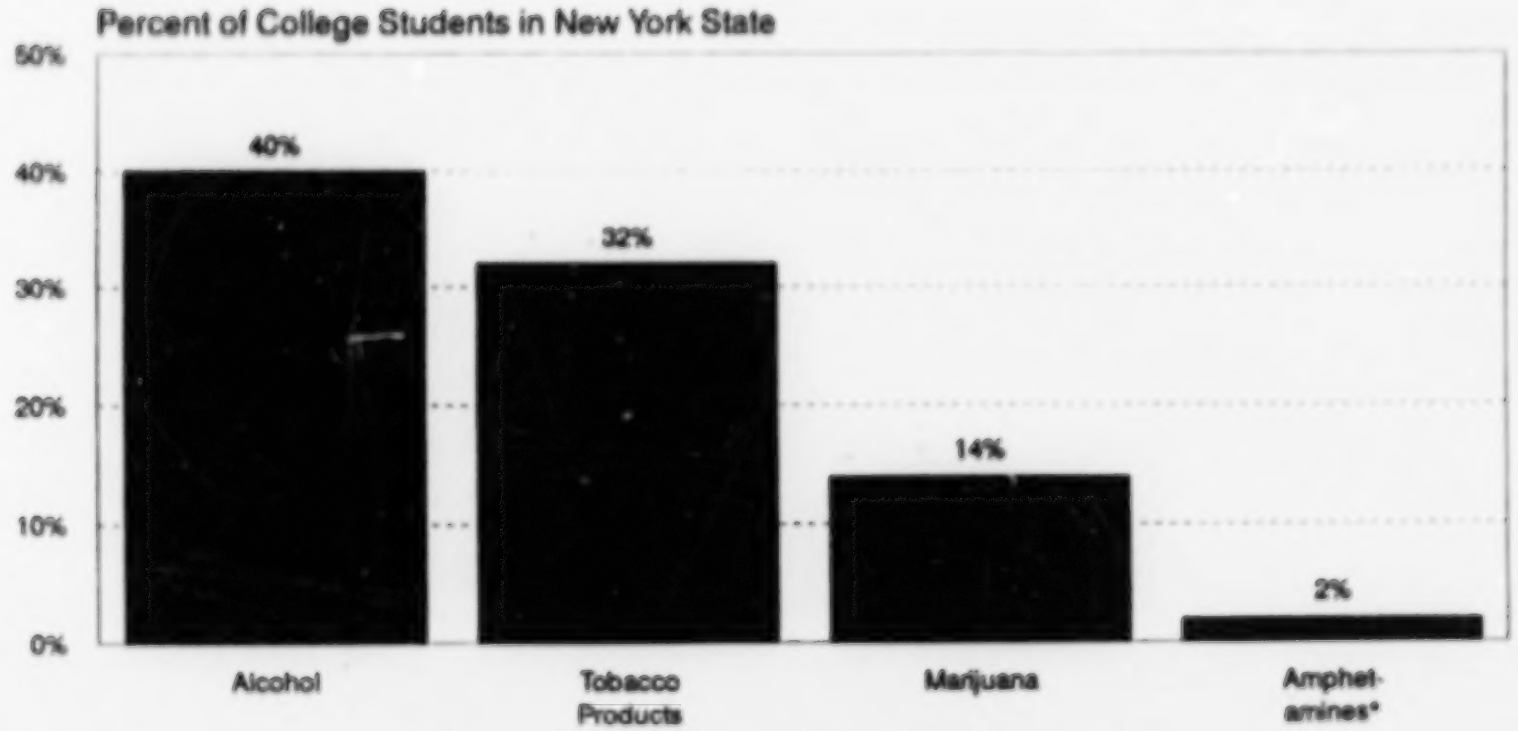
Figure 1. Major Substances Used by College Students in New York State During Lifetime



*Hallucinogens (e.g., LSD, PCP); Amphetamines (e.g., diet pills, speed).

Source: OASAS College Survey, 1996.

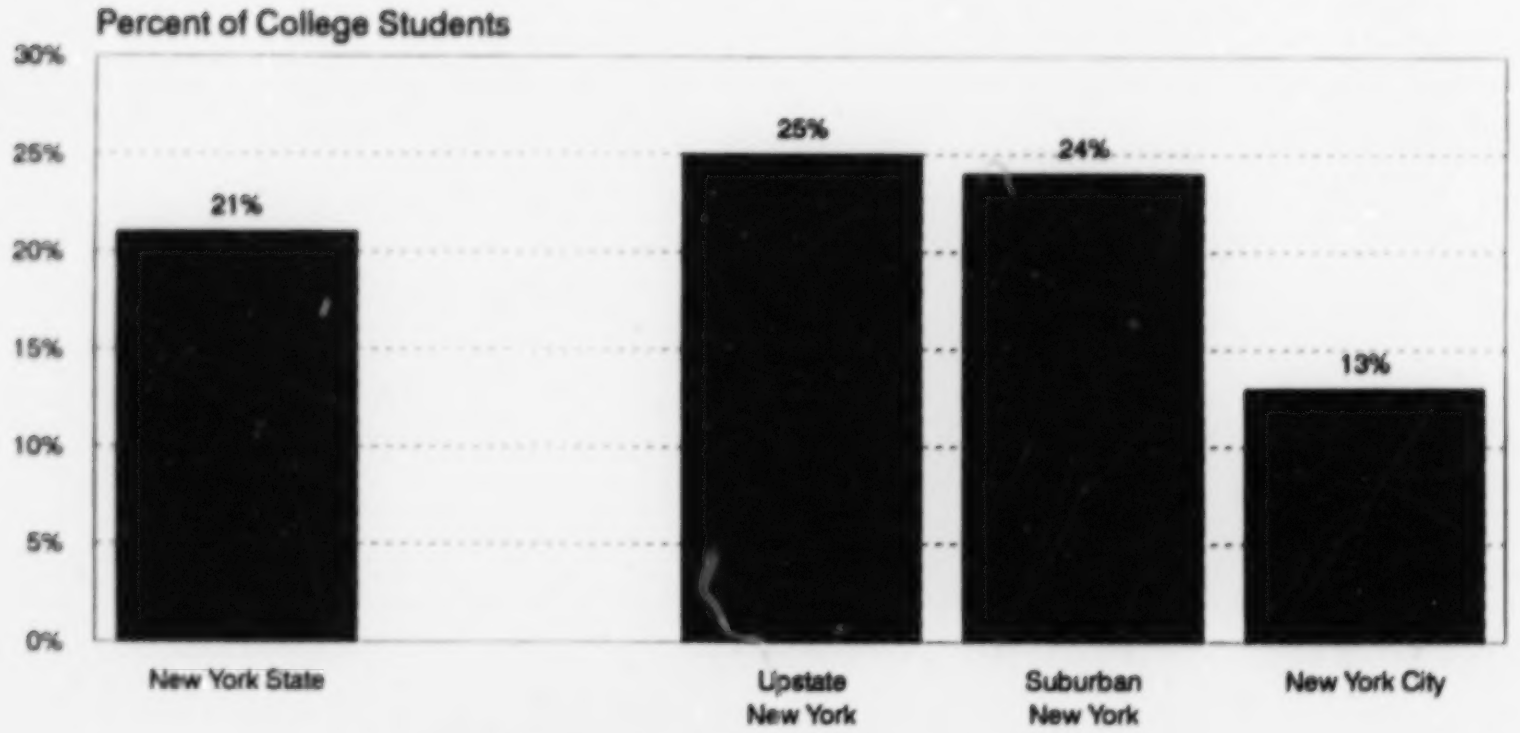
Figure 2. Major Substances Used by College Students in New York State "Once a Week or More" During the Past Year



*Amphetamines (e.g., diet pills and speed)

Source: OASAS College Survey, 1996

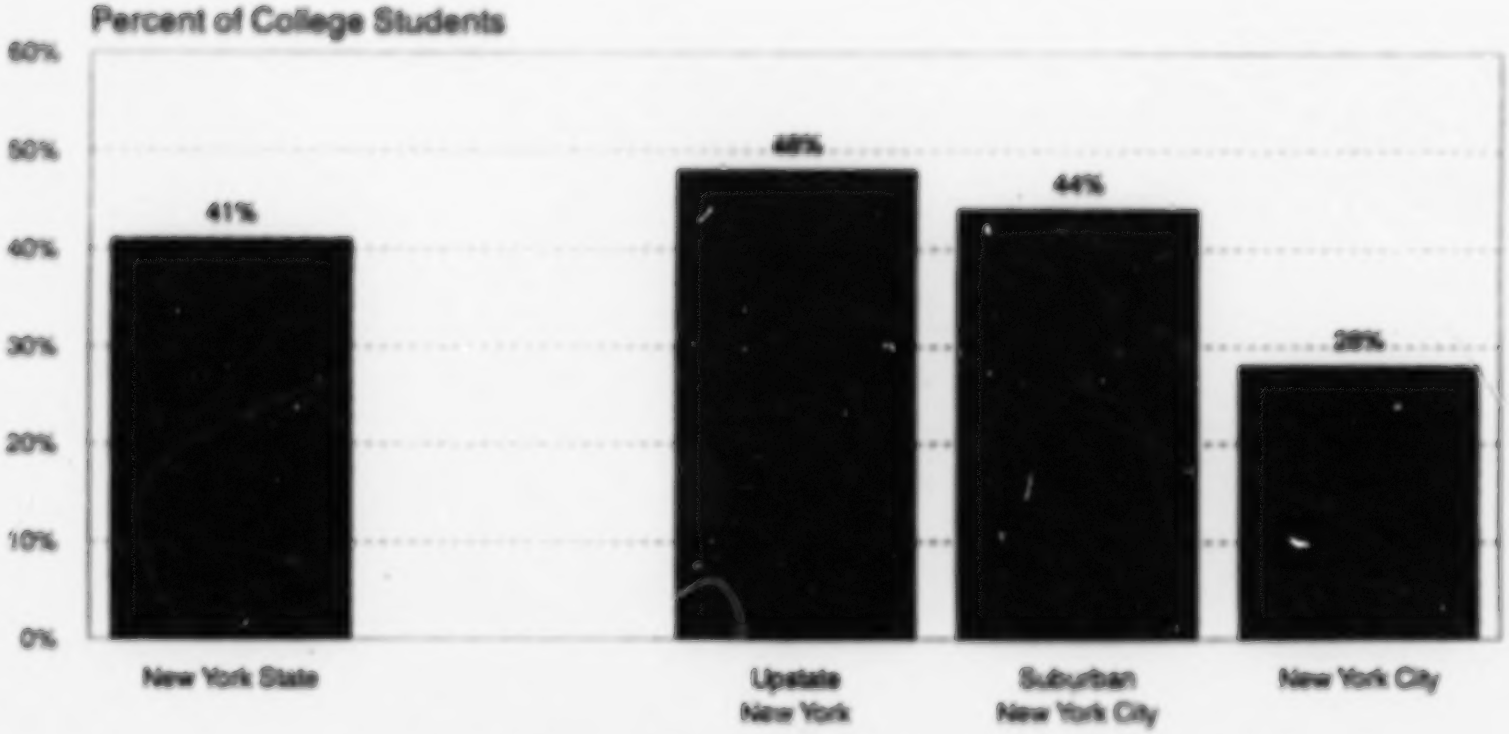
Figure 3. Marijuana Use by College Students in New York State
"Once a Month or More" During the Past Year by Region of College Location*



*Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester Counties; upstate New York includes the remaining upstate counties.

Source: OASAS College Survey, 1996

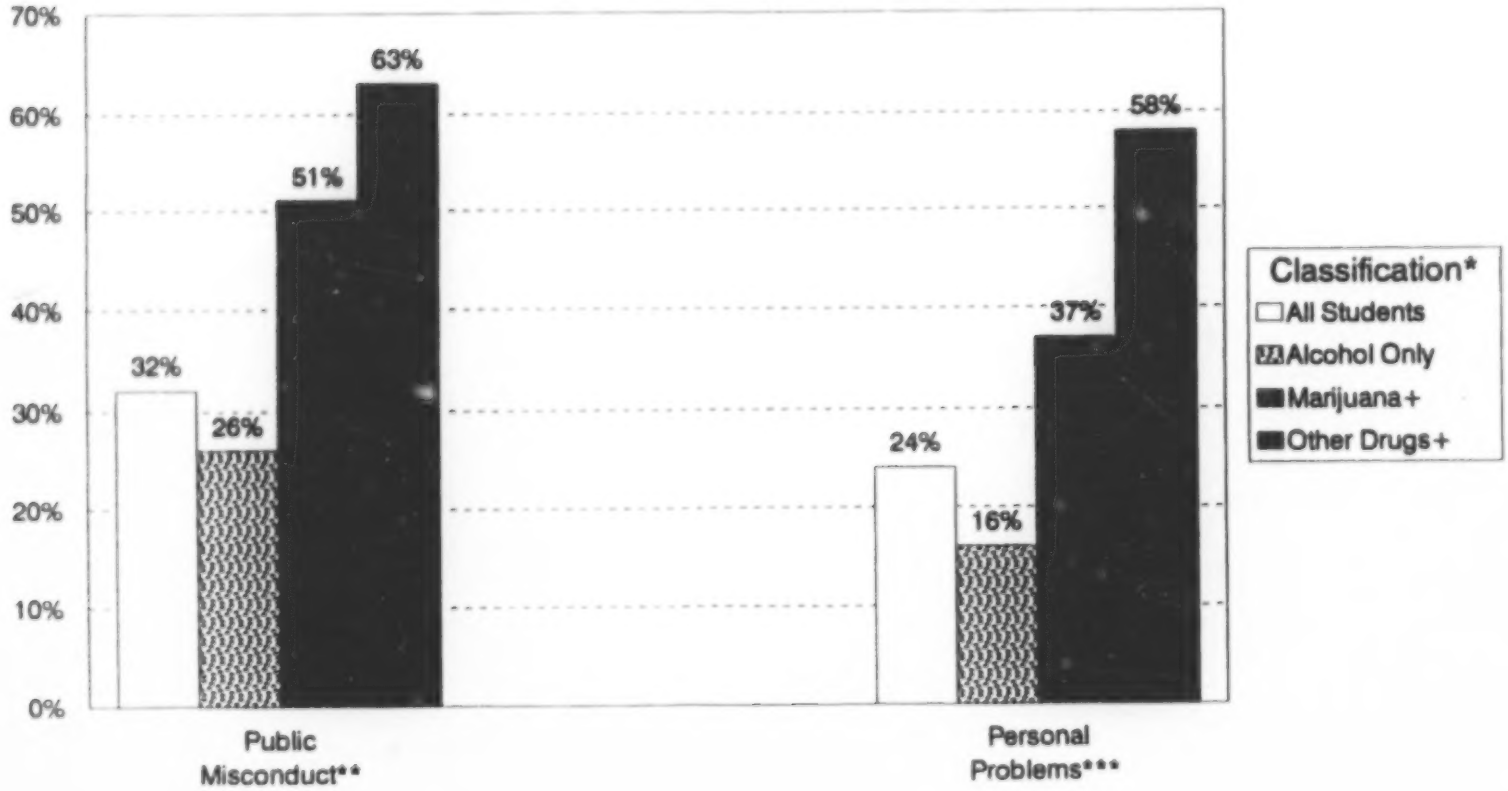
Figure 4. "Binge Drinking" in the Past Two Weeks Among College Students in New York State By Region of College Location*



*"Binge Drinking" defined as five or more drinks in one sitting. Suburban New York City includes Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, and Westchester Counties; upstate New York includes remaining upstate counties.

Source: OASAS College Survey, 1996.

Figure 5. Consequences Associated with Substance Use Among College Students in New York State By "Alcohol and Drug Use" Classification*



*This classification divides students into three groups of increasing involvement with substances.
**Public Misconduct: arrested for DWI/DUI, damaged property, fighting, trouble with authorities because of substance use in past year.
***Personal Problem: suicide attempt or ideation, sexual misconduct, failed attempt at stopping use, hurt because of substance use in past year.

Source: OASAS College Survey, 1996.

BEST COPY AVAILABLE